



**MASTER PLAN AND ZONING COMMITTEE**  
**City of Novi Planning Commission**  
**November 08, 2017 at 6:00 p.m.**  
**Novi Civic Center – Mayor’s Conference Room**  
**45175 W. Ten Mile, Novi, MI 48375**  
**(248) 347-0475**  
**AGENDA**

**Members:** Anthony, Avdoulos, Pehrson

**Staff Support:** Barb McBeth, Sri Komaragiri, Tom Schultz

**1. Roll Call**

**2. Approval of Agenda**

**3. Audience Participation and Correspondence**

**4. Discussion Items**

A. Rezoning request from RA (Residential Acreage) to R-4 (One-Family Residential)

Review and provide comments on the rezoning request for a 12 acre property located on south side of Eleven Mile Road, west of Beck Road in section 20. The applicant is proposing a 23-unit multi-family for-sale residential development with frontage and access to Eleven Mile Road.

**5. Adjourn**



## MEMORANDUM

**TO:** MASTER PLAN AND ZONING COMMITTEE  
**FROM:** SRI RAVALI KOMARAGIRI, PLANNER  
**THRU:** BARBARA MCBETH, AICP, CITY PLANNER  
**SUBJECT:** CONSIDERATION OF PRO CONCEPT PLAN FOR OBERLIN WEST  
**DATE:** NOVEMBER 06, 2017

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The petitioner, Pulte Homes of Michigan, is requesting a Zoning Map amendment for a 12 acre property on the south side of Eleven Mile Road, west of Beck Road (Section 20) from RA (Residential Acreage) to R-4 (One-Family Residential) utilizing the City's Planned Rezoning Overlay (PRO) option. The applicant states that the rezoning request is necessary to allow the development of a 23-unit single residential development. The request is being presented to the Master Plan and Zoning Committee, as the request is not consistent with the recommended maximum density permitted on the Future Land Use Plan.

The applicant is proposing a 23-unit multi-family for-sale residential development with frontage and access to Eleven Mile Road. All proposed internal roads are public. There are regulated woodlands located on the south side of the property, which are proposed to be impacted. There is a large open area of water which is considered a wetland which is proposed to be filled completely. A secondary access and wetland mitigating are proposed on the adjacent property which is also identified as International Transmission Company (ITC Corridor). This is not a gated community.

The concept plan proposes a net density of 2.1 dwelling Units per acre. The proposed density is 62 percent higher than the permitted density. It is about 36 percent lower than maximum allowable R-4 density. Staff believes that the subject property has potential for slight increase density from 0.8 dwelling units given the surrounding development.

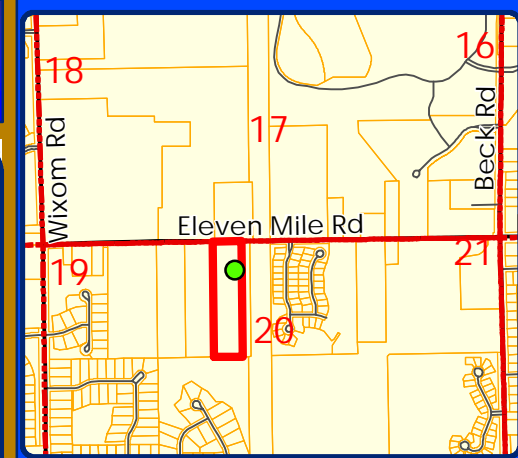
Staff provided initial input at the Pre-application meeting that was held on July 10, 2017. The applicant revised the plans based on the comments provided and submitted a PRO Concept Plan for review.

Staff is requesting the Committee to consider the applicant's request, review staff and consultants review letter and provide input to direct staff with further reviews. The review letters from the recent Concept Plan review are attached to this memo.

**MAPS**  
**Location**  
**Zoning**  
**Future Land Use**  
**Natural Features**

# JSP17-49 Oberlin West: Rezoning 18.721

Location



### LEGEND

 Sections



**City of Novi**  
Dept. of Community Development  
City Hall / Civic Center  
45175 W Ten Mile Rd  
Novi, MI 48375  
cityofnovi.org

Map Author: Sri Komaragiri  
Date: 10/30/17  
Project: JSP17-49 Oberlin West: Rezoning 18.721  
Version #: 1

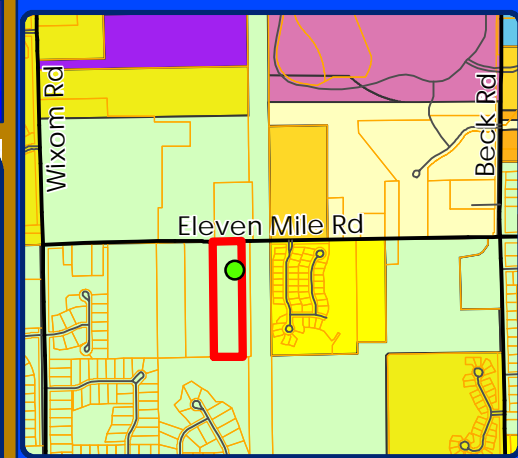
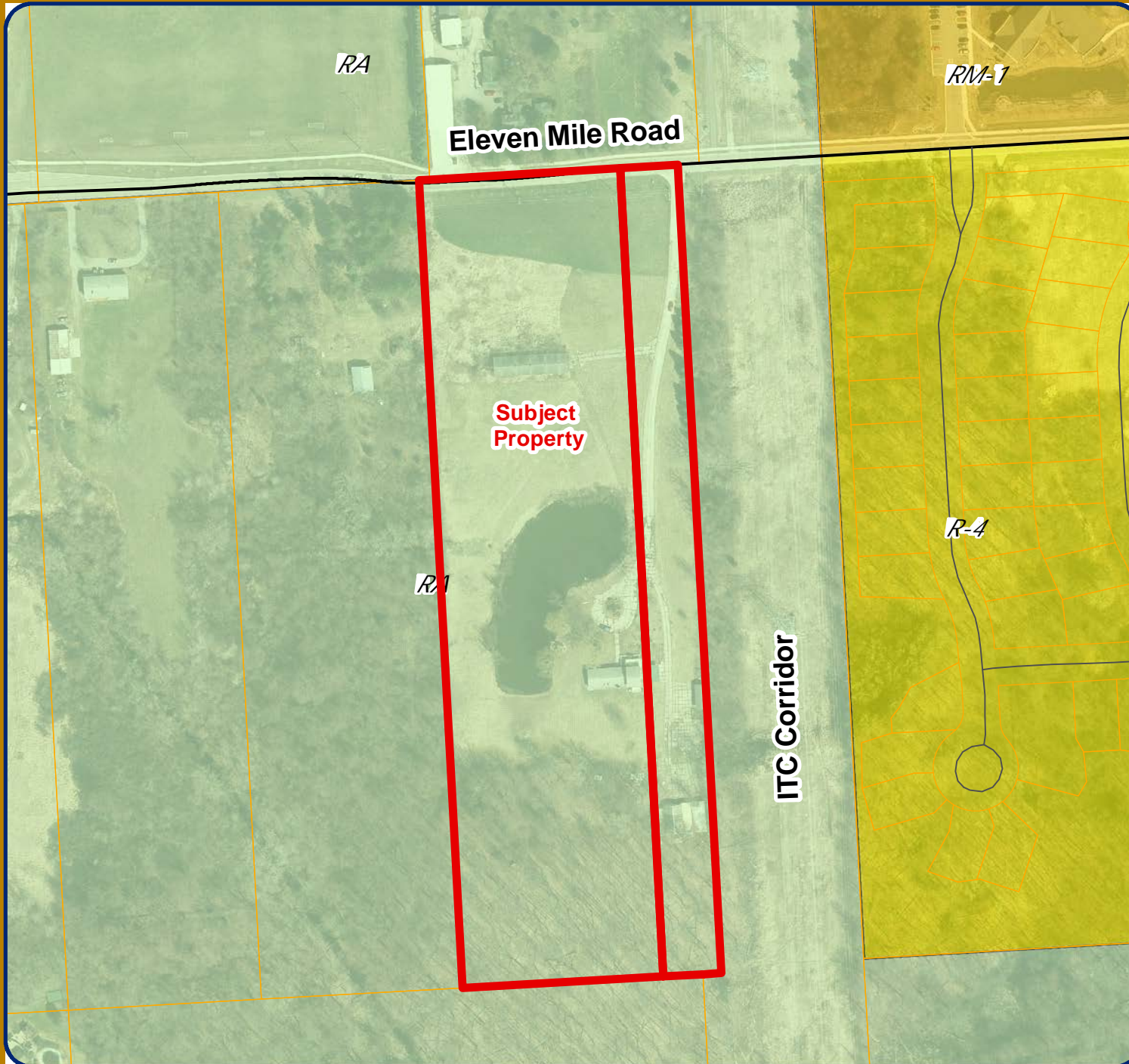


### MAP INTERPRETATION NOTICE











Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

# JSP17-49 Oberlin West: Rezoning 18.721

Zoning



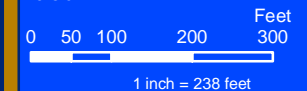
### LEGEND

-  R-A: Residential Acreage
-  R-1: One-Family Residential District
-  R-3: One-Family Residential District
-  R-4: One-Family Residential District
-  RM-1: Low-Density Multiple Family
-  RM-2: High-Density Multiple Family
-  I-1: Light Industrial District
-  I-2: General Industrial District
-  OS-1: Office Service District
-  OSC: Office Service Commercial



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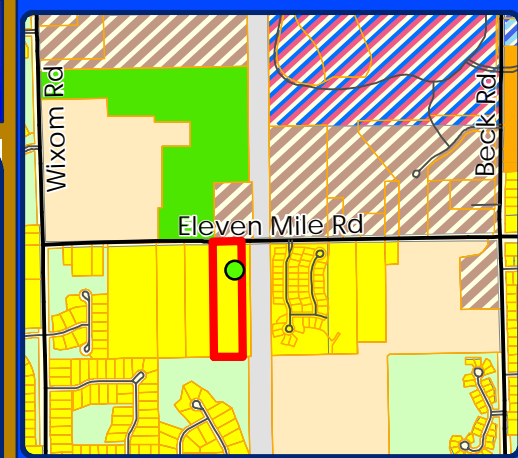
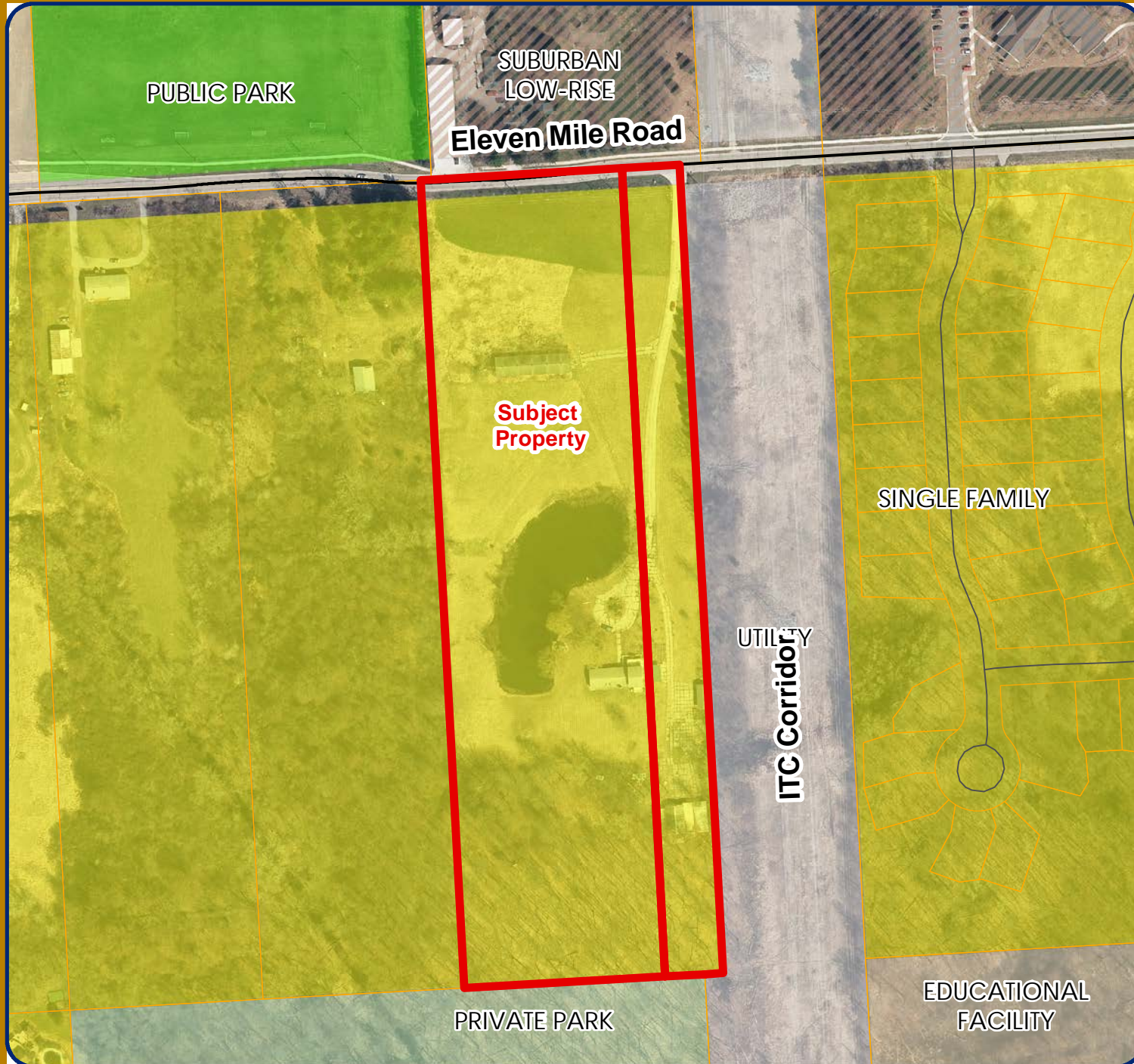


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# JSP17-49 Oberlin West: Rezoning 18.721

Future Land Use



**LEGEND**


**FUTURE LAND USE**

- Single Family
- Multiple Family
- Suburban Low-Rise
- Community Office
- Office RD Tech
- Office Commercial
- Community Commercial
- Educational Facility
- Public Park
- Private Park
- Utility

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0 50 100 200 300 Feet  
1 inch = 238 feet

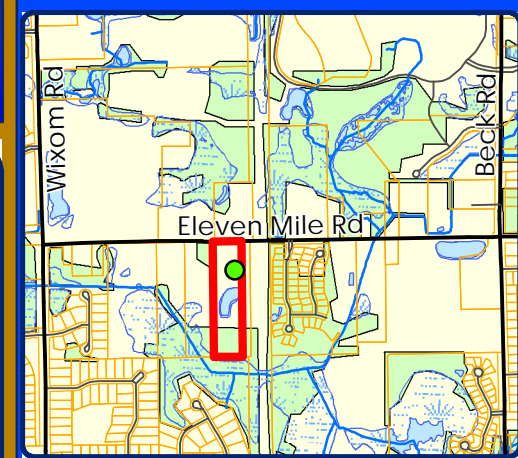


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# JSP17-49 Oberlin West: Rezoning 18.721

Future Land Use



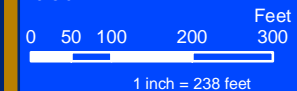
### LEGEND

- WETLANDS
- WOODLANDS



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**REZONING NARRATIVE**





June 16, 2017

Ms. Sri Komaragiri  
**City of Novi – Planning Department**  
45175 West Ten Mile Road  
Novi, Michigan 48375

Re: Pulte Homes,  
Planned Rezoning Overlay (PRO) Conceptual Submittal Package

Dear Ms. Komaragiri,

We are pleased to present to you a proposed detached single family site condominium residential development by Pulte Homes of Michigan. Please accept this letter, accompanying plans, and supplemental information as the Conceptual PRO submittal for our client's Oberlin West development. We are providing this PRO package for your distribution and consideration by Staff and the Masterplan and Zoning Committee.

#### **PROJECT OVERVIEW**

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Oberlin West is an exclusive 23 unit residential community located on an approximate 12.85-acre parcel in Section 22 in the City of Novi, Oakland County, Michigan. The proposed parcel is located on the south side of 11 Mile Road, between Beck and Wixom Roads. The subject parcel contains woodlands to the south and a manmade pond in the center. There is an existing hedgerow along the easterly property line. The subject parcel is currently zoned RA (Single Family Residential) and is being used as a single family residential lot.

The development will utilize the City's Planned Rezoning Overlay (PRO) development option to allow for a detached single family housing use under the R-4 (One-Family Residential District) zoning overlay. Oberlin West boasts just under 6 acres of open space with trails that connect to Oberlin East and to the larger ITC Trail and City of Novi pedestrian system. It will contain public roads with sidewalks on both sides of the street and is also proposed to be served by public sewer and water located within the 11 Mile Road right-of-way. These public utilities will have the capacity to serve the development. Storm water management is proposed to be addressed through the construction of a detention basin at the center of the property. The detention pond will be designed in accordance with the City's requirements for 100-year detention. The development is planned to be constructed in one phase.

#### **PROJECT TEAM**

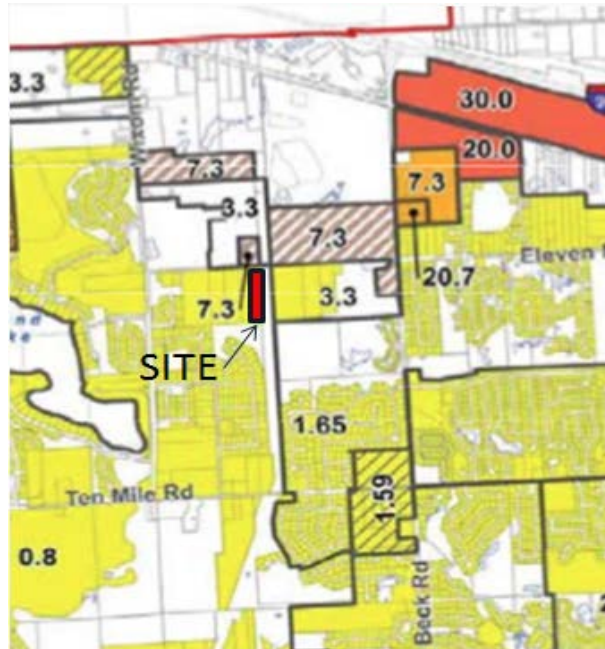
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Pulte Homes of Michigan – Developer  
Atwell – Land Planning, Engineering, Landscape Architecture and Wetlands  
Jim Allen – Woodlands  
Flies and Vanderbrink – Traffic

## MASTER PLAN ANALYSIS

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Future Land Use areas designated as Single-Family Residential land use is designated for single-family detached residential. The recommended density or the number of dwellings per acre varies throughout the City. The proposed site is designated as RA with a density of 0.8. Comparatively, adjacent densities are much higher to the east as illustrated in the residential density map below:



Currently, the ITC corridor appears to be utilized as a dividing line between densities in the area of the City south of 11 Mile Road. Due to the fact that the ITC corridor is such a dominant part of the landscape in this area it may be more prudent to integrate it into the residential fabric as opposed to using it as a dividing line. There are other natural features, areas that cannot be developed, such as wetland, flood plain and stream in this area that could be utilized as a separation of densities which would allow for a much softer transition in the residential fabric.

The 12.85 acre parcel is a good example of such a situation. The proposed development seeks to utilize the ITC corridor to connect neighborhoods by way of pedestrian pathways and would look to preserve the natural areas to the south as a buffer to lower density residential neighborhoods on the other side.

According to the 2016 Master Plan Update, walkability is a consideration for most age groups when considering housing in the City of Novi. The parcel's proximity to the ITC corridor allows for opportunity to bridge the gap between existing non-motorized pathways. Since the City seeks to encourage an active and healthy lifestyle through extensive pathway and sidewalk connectivity, the proposed development fits nicely in to this area.

The size and location of this parcel within a residentially developed portion of the City increases the potential for its development given the population growth and housing demand in the area. The lot size at the existing density is not currently a market demand. Rather, the proposed small lot size and proposed home square footage is the current market trend and lends itself well to the proposed cluster type development on the 12.85 acre parcel.

There are several goals and objectives listed in the Master Plan which would be addressed by this proposed development. These are as follows:

1. Strategic Residential Location: The site is located within a thriving residentially developed area of the City. The proposed use mimics that of the existing and master planned uses for the parcel. In addition, the infrastructure in the area supports the proposed density.
2. Preservation of Natural Resources: The proposed plan has been designed to preserve nearly 75% of the high quality woodland areas and the entire length of the existing hedge row along the east side of the property.
3. Maintain High Quality Architecture And Design Throughout The City: Pulte Homes is known for its attractive residential developments and is looking to expand on selling quality homes in the City that will contribute positively to the City's image.
4. Pedestrian Enhancement: The City of Novi includes 225 miles of public pedestrian paths, bike paths, and bike routes. 90 miles of proposed paths are in the works for the City. The proposed 1,160 linear feet of pathway represents an effort toward completion of that goal.

## **PUBLIC BENEFITS FOR REZONING**

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The requested R-4 zoning, with a PRO Development Agreement would be in the public's best interest when compared to development that could occur under the site's current zoning. We offer the following public benefits with the PRO project;

1. Preservation of Natural Features: The proposed layout has been designed to preserve 75% of the on-site high quality woodlands located on the south end of the site. The hedge row along the eastern property line will also be preserved.
2. Open Space: Oberlin West proposes 46% open space. In addition, the development proposes a minimum 30' buffer surrounding the units on all sides. This allows the perception of large open spaces surrounding the developed area of the site as well as providing the preservation of large contiguous areas of woodland and wetland that exists to the south and west of the property.
3. Pedestrian Nature Trail: The development proposes a pedestrian nature trail that connects to Oberlin East as well as the ITC Trail to the north. This trail system is part of a larger network of trails and paths that extends through the City offering the residents of Oberlin West an opportunity to hike, walk or run through an extensive trail system.
4. Expansion of ITC Trail: The developer is proposing to provide 1,160 linear feet of off-site pedestrian trail to connect to the existing ITC Trail to the north.

5. Housing Next to School: Novi Middle School is located on the north side of 11 Mile Road north west of the proposed development. The proposed sidewalk in front of the development will connect to the existing sidewalk in front of the school thereby completing a pedestrian network. Residents of the development will be within safe walking distance from home to school.

**REQUESTED ORDINANCE DEVIATIONS**

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The following deviations from the existing City Zoning Ordinance are being requested as a condition of the Planned Rezoning Overlay (PRO). These are being requested to preserve the natural features on site, provide for access to the site, while also creating an appropriate density and single family residential character envisioned for Oberlin West.

	<u>R-4 Ordinance Requirements</u>	<u>Requested Deviation</u>
• Minimum Lot Width (3.1.5)	80'	72'
• Minimum Lot Area (3.1.5)	10,000 SF	8,640 SF
• Rear Yard Setback (3.1.5)	35'	25'
• Minimum Side Yard Setback(3.1.5)	10'/Combined 25'	10'/Combined 20'
• Maximum Lot Coverage (3.1.5)	25%	40%

We look forward to your earliest review of this development and rezoning proposal. Included with this submittal are the following documents:

- One (1) signed site plan application
- Seven (7) copies of the PRO concept plans, signed & sealed

Thank you for your assistance and cooperation with respect to this project. If you should have any questions or need any additional information, please contact us.

Sincerely,  
**ATWELL, LLC**

Matthew W. Bush, PE, LEED AP  
 Project Manager / Engineer

cc. Joe Skore, Pulte Homes

**CONCEPT PLAN COVER LETTER**



September 18, 2017

Ms. Sri Komaragiri  
**City of Novi – Planning Department**  
45175 West Ten Mile Road  
Novi, Michigan 48375

Re: Pulte Homes,  
Planned Rezoning Overlay (PRO) Conceptual Submittal Package

Dear Ms. Komaragiri,

We greatly appreciate the feedback and comments received during the Pre-application meeting held with City staff on July 10, 2017 and a follow-up meeting with City staff and the Parks and Recreation department held on August 23, 2017. In response to these meetings, we have revised the Concept PRO plans accordingly. Please accept this letter and accompanying plans as a formal re-submittal for our client's Oberlin West development. We are providing this PRO package for your distribution and consideration by Staff, the Parks and Recreation Department, and the Masterplan and Zoning Committee.

For your use, below is a summary of the most recent revisions that we have made to the previous concept plan submittal documents;

- Emergency Access: A secondary emergency access was added to support the development. As discussed at the meeting on August 23, this access is being placed in the ITC easement and will be coordinated with the pathway that is currently being designed by the City Parks and Recreation Department. As discussed, the emergency access pavement section will match the current planned 10' wide asphalt connector pathway and incorporate grass pavers and pathway markers on both sides to provide for the required 20' wide access.
- Detention Outlet: The existing pond is located at a low-point of the site and any existing overflow from this pond is directed to the property to the west. Additional existing contours are shown on sheet 02 to demonstrate this. As this remains the only viable location for the proposed detention and storm water outlet for the development, the proposed pond has been reconfigured to allow for a spreader swale at the discharge location to promote sheet flow at the existing outlet location and eliminate the need for an offsite easement. The proposed maximum 100-year discharge rate from the pond is minimal (less than 1.2 cfs) and the length of the spreader swale being proposed is double the design length as recommended per the "Low Impact Development Manual for Michigan".
- Detention Buffer: A 25-foot buffer has been shown around the perimeter of the proposed storm water basin. The pond has been reconfigured so that this 25-foot buffer does not encroach on any lots.
- Existing Pond/Wetland Impact: Per discussions with the MDEQ staff, the MDEQ will likely regulate any areas of the pond that are less than 6' deep, as wetland impact. Per the recent survey, we are approximating 0.63 acres of MDEQ regulated wetland impact associated with the pond (area less than 6' deep). This mitigation will be provided at a 1:1.5 ratio, or 0.95 acres. The mitigation area is now shown

on the plans and is being proposed partially on our site and partially in the ITC easement on the east side of the property. As discussed, the City would require mitigation of 1:1 for any impact to the open water areas of the site. Per the recent survey, the open water area of the existing pond is 0.86 acres, which is less than the proposed 0.95 acres of mitigation.

- Sidewalks: Sidewalks are now being shown on both sides of the proposed roadway.
- Right-of-way Improvements: A proposed 8' pedestrian pathway and sanitary sewer I being shown across the frontage of the property as requested.

Included with this concept re-submittal are the following documents:

- Seven (7) copies of the revised PRO concept plans, signed & sealed

We look forward to your earliest review and acceptance of this development and rezoning proposal. If you find the enclosed plans acceptable for this stage in the process, we respectfully request you provide the revised plan to the Parks and Recreation designer to coordinate the path design in the ITC easement and move to put us on the next available Master Plan Zoning Committee meeting.

Thank you for your assistance and cooperation with respect to this project. If you should have any questions or need any additional information, please contact us.

Sincerely,  
**ATWELL, LLC**

Matthew W. Bush, PE, LEED AP  
Project Manager / Engineer

cc. Joe Skore, Pulte Homes

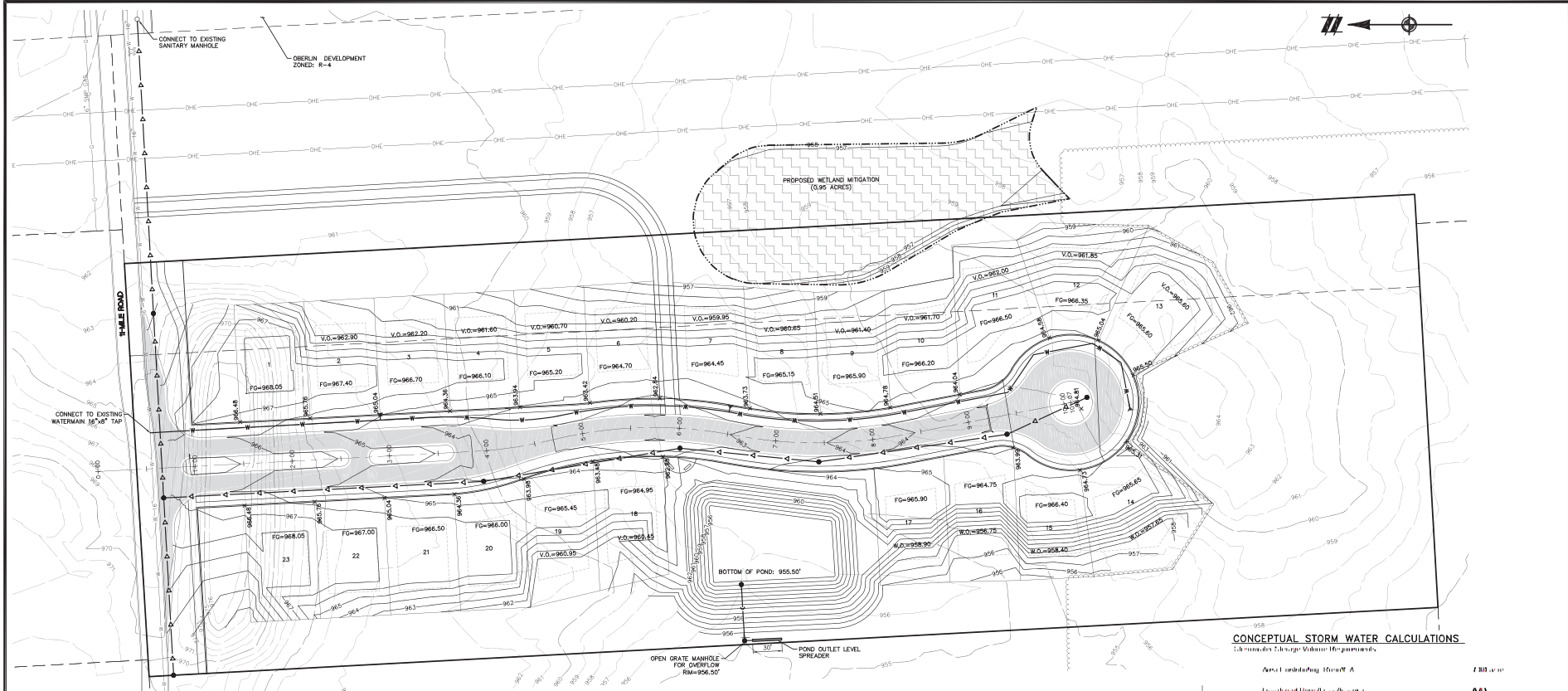
**PRO CONCEPT PLAN**





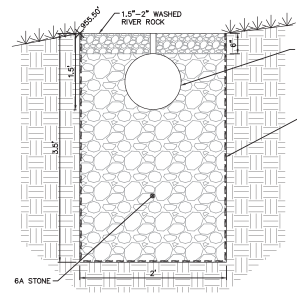
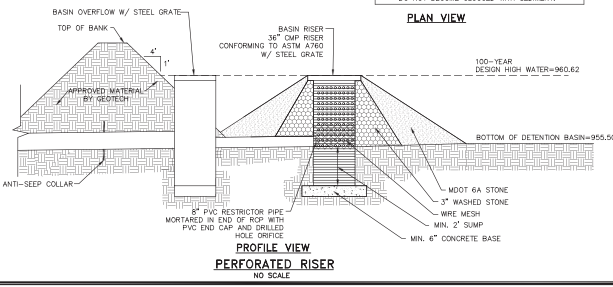
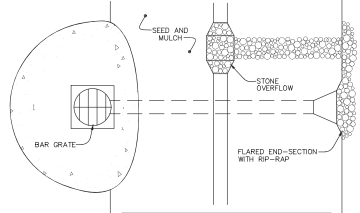






**CONCEPTUAL STORM WATER CALCULATIONS**  
 Minimum Storage Volume Requirements

Area including Street A	7.80 ac-ft
Excluded Area - 0.62 ac-ft	0.62
Maximum Allowable Detention Volume (ac-ft)	7.18 ac-ft
Minimum Required Volume (ac-ft)	6.56 ac-ft
Maximum Storage Volume (ac-ft)	10.74 ac-ft
Minimum Storage Volume (ac-ft)	1.92 ac-ft
Detention Volume (ac-ft)	8.82 ac-ft
Final Detention Volume (ac-ft)	8.82 ac-ft
Final Detention Volume (cfs)	21,023 cfs



**LEVEL SPREADER NOTES**

1. ANY GRADING THAT TAKES PLACE ON THE DOWNHILL SIDE OF THE LEVEL SPREADER SHALL BE RESTORED IMMEDIATELY.
2. THE LEVEL SPREADER SHALL NOT BE CONSTRUCTED IN UNCOMPACTED FILL.
3. THE LEVEL SPREADER SHALL BE CONSTRUCTED SUCH THAT IT IS LEVEL ACROSS THE WHOLE LENGTH OF THE PIPE.
4. AS A CONSERVATIVE MEASURE A 30' LEVEL SPREADER IS BEING PROPOSED.

\*THE LENGTH OF THE LEVEL SPREADER MUST BE EQUAL TO OR GREATER THAN 13 FEET OF PIPE FOR EVERY ONE CUBIC FEET PER SECOND OF DISCHARGE. PER THE "LOW IMPACT DEVELOPMENT MANUAL FOR MICHIGAN"  
 L=13'xQ<sub>1</sub> 13'x1.17cfs=15.21' MINIMUM LENGTH

**811**  
 Know what's below.  
 Call before you dig.  
 THE LOCATION OF UTILITIES UNDERGROUND UTILITIES SHOULD BE SHOWN BY AN APPROPRIATE ANY UNRECORDED UTILITIES SHOULD BE THE CONTRACTOR SHALL OBTAIN THE EXACT LOCATION AND DEPTH OF THE UTILITIES FROM THE CONTRACTOR AND ADDRESS TO BE FULLY RESPONSIBLE FOR ANY DAMAGE CAUSED BY ANY UNRECORDED UTILITIES TO EXISTING UTILITIES AND ALL UNDERGROUND UTILITIES.

**ATWELL**  
 866.850.0000 www.atwell-group.com  
 311 WOODLAND STREET  
 ANN ARBOR, MI 48106  
 734.994.4000

SECTION 22  
 TOWN 1 NORTH, RANGE 8 EAST  
 CITY OF NOVI  
 OAKLAND COUNTY, MICHIGAN

PULTE HOMES OF MICHIGAN, LLC  
 OBERLIN WEST  
 CONCEPT PRO  
 GRADING AND UTILITY PLAN

DATE: JUNE 12, 2017  
 09/25/2017 PER CITY

REVISIONS

SCALE 0 25 50  
 1" = 50 FEET

DR. STC  
 P.M. M. BUSH  
 BOOK  
 JOB 17001091  
 SHEET NO. 04

PRELIMINARY - NOT FOR CONSTRUCTION





**PLANNING REVIEW**



## PLAN REVIEW CENTER REPORT

October 25 2017

### Planning Review

Oberlin West

JSP17-49 with Rezoning 18.721

#### PETITIONER

Pulte Homes of Michigan, LLC

#### REVIEW TYPE

Rezoning Request from RA (Residential Acreage) to R-4 (One-Family Residential) with a Planned Rezoning Overlay (PRO)

#### PROPERTY CHARACTERISTICS

<b>Section</b>	20	
<b>Site Location</b>	South side of Eleven Mile Road, west of Beck Road Parcel Id's: 50-22-20-100-007	
<b>Site School District</b>	Novi Community School District	
<b>Site Zoning</b>	RA Residential Acreage	
<b>Adjoining Zoning</b>	North	RA Residential Acreage (legal non-conforming use)
	East	R-4 One Family Residential
	West	RA Residential Acreage
	South	RA Residential Acreage
<b>Current Site Use</b>	Single family residence	
<b>Adjoining Uses</b>	North	Forestry Service
	East	Single Family Residential development
	West	Single family residence
	South	Single Family Residential development
<b>Site Size</b>	Net Site Acreage 12.85 Acres	
<b>Plan Date</b>	September 15, 2017	

#### PROJECT SUMMARY

The petitioner is requesting a Zoning Map amendment for a 12 acre property on the south side of Eleven Mile Road, west of Beck Road (Section 20) from RA (Residential Acreage) to R-4 (One-Family Residential) utilizing the City's Planned Rezoning Overlay (PRO) option. The applicant states that the rezoning request is necessary to allow the development of a 23-unit single residential development.

The applicant is proposing a 23-unit multi-family for-sale residential development with frontage and access to Eleven Mile Road. All proposed internal roads are public. There are regulated woodlands located on the south side of the property, which are proposed to be impacted. There is a large open area of water which is considered a wetland which is proposed to be filled completely. A secondary access and wetland mitigating are proposed on the adjacent property which is also identified as International Transmission Company (ITC Corridor). This is not a gated community.

#### PROJECT REVIEW HISTORY

The applicant submitted for a Pre-Application Meeting, which was held on July 10, 2017. Staff has indicated that the proposed zoning conflicts the future land use designation and requested additional information to make an informed decision. The plan requires to be presented at the



Master Planning and Zoning Committee meeting for their input prior to Planning Commission meeting.

### PRO OPTION

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The PRO option creates a “floating district” with a conceptual plan attached to the rezoning of a parcel. As part of the PRO, the underlying zoning is proposed to be changed (in this case from RA to R-4) and the applicant enters into a PRO agreement with the City, whereby the City and the applicant agree to tentative approval of a conceptual plan for development of the site. Following final approval of the PRO concept plan and PRO agreement, the applicant will submit for Preliminary and Final Site Plan approval under standard site plan review procedures. The PRO runs with the land, so future owners, successors, or assignees are bound by the terms of the agreement, absent modification by the City of Novi. If the development has not begun within two (2) years, the rezoning and PRO concept plan expires and the agreement becomes void.

### RECOMMENDATION

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## **LEFT BLANK ON PURPOSE**

### COMMENTS

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Staff is currently not recommending approval mainly for the following reasons.

**Concept Plan Submittal:** The current submittal did not include landscape plan, wetlands and woodlands survey or a Traffic Impact study. Staff was unable to make a full determination of the impacts proposed to the property. It is staff’s understanding from conversations with the Applicant’s Engineer that they are trying to gauge the feasibility of the project before investing time and effort into providing the information. The requirement for a landscape plan can be waived with an expectation that it will conform to the code at the time of Revised Concept Plan submittal, or Preliminary Site Plan submittal, or the applicant could identify and seek reasonable deviations. Traffic did not find major concerns with Traffic counts, so the requirement for a Traffic Impact Study can be deferred until after the Master Plan and Zoning Committee meeting. However, staff requires additional information to determine the actual impacts to the regulated features. The values provided for wetland impacts and wetland mitigation do not match with staff’s calculation. Refer to the Wetland review letter for more detail.

**Public Benefits:** The applicant has provided a list of benefits at the time of Pre-application meeting. The applicant has not made revisions based on staff’s comments provided at that meeting. Construction of ITC trail would be considered a benefit, but it is scheduled for construction by the City next year. Each of the other proposed benefits do not meet the intent of public benefits as listed in the Zoning Ordinance. The intent of the benefits is to enhance the project area; such enhancement would be unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay. The applicant should reconsider the benefits being proposed to align more with the intent of the ordinance.

**Density Comparison:** The concept plan proposes a net density of 2.1 dwelling Units per acre. The proposed density is 62 percent higher than the permitted density. It is about 36 percent lower than maximum allowable R-4 density. Staff believes that the subject property has potential for slight increase density from 0.8 dwelling units given the surrounding development.

The proposed project is intended as an extension to the existing Oberlin development, east of ITC corridor. Please see below a comparison between the current concept plan, Oberlin West and

corresponding zoning districts. The proposed density of 2.1 DUA aligns more with R-2 (2.0 DUA). However, the lot sizes proposed would require significant deviations from R-2 code. Staff recommends that the applicant consider revising the density to stay under R-2 maximum and seek R-2 zoning. Proposed lot size may be justified as an extension to the existing Oberlin development. The applicant is proposing approximately 30 feet buffer behind the lots to compensate for reduction in rear setbacks. The applicant may also consider reducing the extent of deviations sought especially for the lot coverage (25% maximum, 40% proposed).

	Oberlin West	Oberlin (Existing)	R-4 (Requested Rezoning)	RA (Existing Zoning)	R-2 (Staff Recommended)
<b>Zoning</b>	RA	R-4			
<b>Density</b>	2.1	3.2	3.3	0.8	2.0
<b>Lot Size</b>	8,600 sf	8,048 sf		1 acre	18,000
<b>Lot width</b>	80 ft.	72 ft.	80 ft.	150 ft.	110 ft.
<b>Front setback</b>	30 ft.	30 ft.	30 ft.	45 ft.	30 ft.
<b>Side Setbacks</b>	10 ft. one side 20 ft. total	10 ft. one side 20 ft. total	10 ft. one side 25 ft. total	20 ft. one side 50 ft. total	15 ft. one side 40 ft. total
<b>Rear setback</b>	25 ft.	35 ft.	35 ft.	50 ft.	35 ft.
<b>Lot Coverage</b>	40 %	25%	25 %	25 %	25%
<b>Open Space</b>	44 % (to be determined)	21.77 %			

**ITC approval:** The feasibility of the project depends significantly on the feasibility of the secondary emergency access. The concept plan also proposes a significant portion of wetland mitigation within ITC corridor. The applicant should contact and get some direction from ITC (International Transmission Company) whether it is feasible. If not, an alternate location for secondary emergency access and wetland mitigation should be proposed.

**Please refer to additional comments that were provided in the Planning Review Chart and this letter.**

**COMPARISON OF ZONING DISTRICTS**

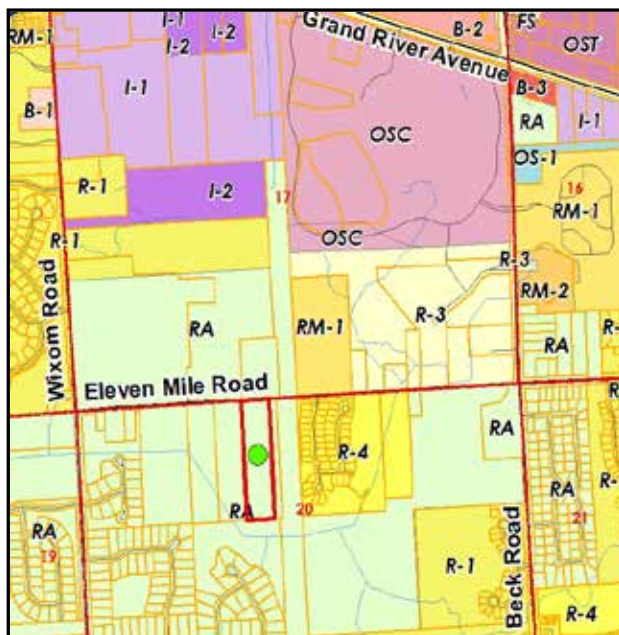
The following table provides a comparison of the current (RA) and proposed (R-4) zoning classifications.

	RA Zoning (Existing)	R-4 Zoning (Proposed)
Principal Permitted Uses	<ol style="list-style-type: none"> <li>One-family dwellings</li> <li>Farms and greenhouses</li> <li>Publicly owned and operated parks</li> <li>Cemeteries</li> <li>Schools</li> <li>Home occupations</li> <li>Accessory buildings and uses</li> <li>Family day care homes</li> </ol>	<ol style="list-style-type: none"> <li>One-family detached dwellings</li> <li>Farms and greenhouses</li> <li>Publicly owned and operated parks, parkways and outdoor recreational facilities</li> <li>Home occupations</li> <li>Keeping of horses and ponies</li> <li>Family day care homes</li> <li>Accessory buildings and uses</li> </ol>
Special Land Uses	<ol style="list-style-type: none"> <li>Raising of nursery plant materials</li> <li>Dairies</li> <li>Keeping and raising of livestock</li> <li>All special land uses in Section 402</li> </ol>	<ol style="list-style-type: none"> <li>Places of worship</li> <li>Schools</li> <li>Utility and public service buildings (no storage)</li> </ol>

	RA Zoning (Existing)	R-4 Zoning (Proposed)
	5. Nonresidential uses of historical buildings 6. Bed and breakfasts	4. yards) 5. Group day care, day care centers, adult day care 6. Private noncommercial recreation areas 7. Golf courses 8. Colleges and universities 9. Private pools 10. Cemeteries 11. Railroad right of way 12. Mortuary establishments 13. Bed and breakfasts 14. Accessory buildings and uses
Minimum Lot Size	43,560 square feet (1 acre) 150 feet	10,000 sq ft
Minimum Lot Width		80 ft
Building Height	2 1/2 stories -or- 35 feet	2 1/2 stories -or- 35 feet
Building Setbacks	Front: 45 feet Side: 20 feet (aggregate 50 feet) Rear: 50 feet	Front: 30 ft Side: 10 ft (aggregate 25 ft) Rear: 35 ft

**COMPATIBILITY WITH SURROUNDING LAND USE**

The surrounding land uses are shown in the chart below. The compatibility of the proposed rezoning with the zoning and uses on the adjacent properties should be considered by the Planning Commission in making the recommendation to City Council on the rezoning request. The following table summarizes the zoning and land use status for the subject property and surrounding properties.



Existing Zoning



Future Land Use

	Existing Zoning	Existing Land Use	Master Plan Land Use Designation
<b>Subject Property</b>	RA Residential Acreage	Single family residence	There is one single family residence on the property. It is master planned for <u>Single Family Residential (0.8 DUA)</u> .
<b>Northern Parcels (across Eleven Mile Road)</b>	RA Residential Acreage (legal non-conforming use)	Forestry Service (long-standing non-conforming use)	It is currently used with non-conforming uses. It has <u>Planned Suburban Low Rise overlay</u> with allowable maximum density of 7.3 DUA. The future use for this property is very unlikely to change.
<b>East ITC Corridor</b>	RA Residential Acreage	ITC Power line corridor	The use will remain the same. The City is gearing up for constructing a pathway through the corridor as part of the ITC trail development.  ITC corridor is supposed to act as the buffer between higher density residential to the east and lower density residential to the west,
<b>Eastern Parcels (across ITC Corridor)</b>	R-4 One Family Residential	Single Family Residential development (Open space Preservation Option???)	This property is currently under construction as a 72 unit single family development utilizing City Open Space Preservation. The development stayed under the maximum allowable density of 3.3 DUA with approximately 0.19 acre lots and an approximate minimum lot width of 72 feet. It is also master planned for <u>Single Family Residential (3.3 DUA)</u> .
<b>Western Parcels</b>	RA Residential Acreage	Single family residence	There is one single family home on the parcel to the west. It is master planned for Single Family Residential (0.8 DUA)
<b>Southern Parcels</b>	RA Residential Acreage	Single Family Residential development	The property to the south is an existing single family residential development with approximately 0.65 acre lots and an approximate minimum lot width of 107 feet.  Single Family Residential (0.8 DUA)

According to 2016 Future Land Use map, ITC Corridor south of Eleven mile is typically perceived as a line of separation between low density residential uses (0.8 DUA) and medium density residential uses (3.3 DUA to 7.3 DUA) on the east. However, as is evident from the 2016 Residential density map (see below), the subject property is surrounded by higher density north of Eleven Mile Road, if developed using Planned Suburban Low-Rise overlay option. It should also be noted that the existing residential development south of the subject property is zoned RA, but meets the lot size requirements for R-1. The applicant suggests integrating ITC corridor into the residential fabric as opposed to using it as a dividing line. The three existing properties west of subject property have redevelopment potential. They could be developed as RA lots or may seek rezoning. The subject property could set the direction for the future development for the properties.

Staff agrees that the density could be slightly higher than allowable RA density, but not to exceed R-1 density. Impacts to the surrounding properties as a result of the proposal would be expected as part of the development of any development on the subject property and could include

construction noise and additional traffic. There are additional impacts proposed to regulated woodlands and wetlands on site that can be reduced by proposing a lower density development.



2016 Residential Density Map



Existing Surrounding Uses

#### DEVELOPMENT POTENTIAL AND DENSITY PROPOSED

The land is currently used as a one single family lot. It is zoned Residential Acreage that allows a maximum allowable density of 0.8 dwelling units per acre. The master plan designation expects the subject property is also 0.8 DUA. The approximate gross and net site acreage are listed below.

- Site Area (Gross): 12.95 acres
- Right-of-Way: 0.58 acres
- Wetlands: 0.63 acres
- Open Water: 0.83 acres
- Site Area (Net): 10.91 acres

According to RA standards, the site can be developed up to 14 units. The applicant is proposing to develop 23 units with a maximum density of 2.1 DUA. The proposed density is 62 percent higher than the permitted density. It is about 36 percent lower than maximum allowable R-4 density. At the time of Pre-application, the applicant was suggested to utilize the Open Space Preservation option to develop this site.

#### REVIEW CONCERNS

**Engineering:** Storm water would be collected by a single storm sewer collection system, detained on-site, and discharged at the west property line. The development will contain public roads and is also proposed to be served by public sewer and water. The plan proposes to connect to public water along Eleven Mile Road by connecting to Oberlin Phase 1 site on the east of subject property. The proposed rezoning is adding more density for the subject property (increase of 1.3 DUA) which would create additional impact than previously anticipated. The City's existing infrastructure has sufficient capacity to accommodate the increased density in this proposed development, however, any time parcels are rezoned to a use that results in a higher sanitary sewer discharge, acquisition of additional contractual sewer capacity downstream of Eight Mile Road may be required at the time of build-out. A full scale engineering review would take place during the course of the Site Plan Review process for any development proposed on the subject property, regardless of the zoning.

**Landscape:** A landscape plan was not included with the current submittal. The applicant is expected to conform to the code unless deviations are requested with a landscape plan.

**Traffic:** Traffic review states that the number of trips does not exceed the City's threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour. Traffic counts may not warrant a full traffic impact study, but a traffic impact study is required as per rezoning requirement. The applicant has not provided one with this submittal. The proposed concept plan mostly conforms to Traffic code except for the length of the proposed cul-de-sac. The applicant has proposed a cul-de-sac for a street length of over 1,000 feet. Under R-4 zoning, city standards only allow for cul-de-sacs on streets that are 800 feet or less. Refer to the traffic review letter for additional information.

**Woodlands:** The Plan does not include a tree survey, list of existing trees, or list of proposed trees to be removed. According to information submitted by the applicant via e-mail, existing regulated woodlands on site (south end) is about 3.62 acres. Proposed impact to existing regulated woodland area is about 1.0 acres. The applicant is proposing about 27 percent of woodland removal. The applicant should review and revise the Plan in order to better indicate how the on-site Woodland Replacement requirements will be met. Woodlands review was not unable to make a proper determination due to insufficient information.

**Wetlands:** The Plan appears to note that the open water section of the wetland is 0.83 acres in size. It also notes that the wetland fringe area is 0.63 acres. The site development proposes to fill the existing wetland in its entirety. The plan indicates a total impact of about 0.63 acres to the wetlands excluding the pond. The applicant should recalculate wetlands impacts and required mitigation including the pond. The proposed impacts would require mitigation, which is significantly proposed on the adjacent ITC corridor to the east. The applicant shall provide documentation that indicates that this location for wetland mitigation construction will be authorized by ITC.

**Facade:** Elevations are not usually required as part of the Planned Rezoning Overlay Concept plan unless the applicant requests any deviations from the Ordinance or if enhanced elevations are proposed as a public benefit. The applicant is not requesting either with the current submittal and hence is expected to conform to the code at the time of Preliminary Site Plan submittal. Staff recommends the applicant consider enhanced elevations, possibly brick to first floor belt line on all sides.

**Fire Access:** The applicant has currently proposed a secondary emergency access as an extension of the City of Novi proposed ITC trail through ITC Corridor. The applicant should initiate the discussions and indicate that the proposed location is allowed by ITC.

**Open Space:** The site plan indicates preserving approximately 5.64 acres (44 %) of open space. The applicant should indicate that areas that are part of this calculation. The concept plan proposes one pocket park with two benches near the proposed storm water pond. Staff believes that there is additional opportunity for providing additional amenities within the site. The applicant indicates that the proximity to proposed ITC trail would suffice for Usable open space.

**Planning Review Chart:** The applicant should refer to the attached planning review chart for comments that need to be addressed with next submittal and for those that need to be addressed at the time of Preliminary Site Plan.

#### **2017 MASTER PLAN FOR LAND USE: GOALS AND OBJECTIVES**

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The proposed development would follow objectives listed in the 2016 Master Plan for Land Use update (adopted by Planning Commission on July 26, 2017) as listed below. Staff comments are in **bold**. **The applicant has to provide additional information to further demonstrate how these goals are met.**

**1. Quality and Variety of Housing:**

- a. *Provide residential developments that support healthy lifestyles by providing neighborhood open space between neighborhoods. **The development itself does not propose any active recreation other than the required sidewalk system along the road. However, it is proposing a connection to the City of Novi's proposed ITC trail to the east.***
- b. *Provide a wide range of housing opportunities. Attract new residents to the City by providing a full range of quality housing opportunities that meet the housing needs of all demographic groups including but not limited to singles, couples, first time home buyers, families and the elderly. **The current development intends to provide single family detached houses. It is not geared towards senior living or does not provide the missing middle housing.***

**2. Community Identity**

- a. *Maintain quality architecture and design throughout the City. **The applicant can provide enhanced elevations that exceed the minimum requirements.***

**3. Environmental Stewardship**

- a. *Protect and maintain the City's woodlands, wetlands, water features and open space. **The developer is proposing to fill all the existing wetlands on the property. However, the applicant is proposing to save about 73 percent of high quality woodland areas and the entire length of the existing hedge row along the east side of the property. The applicant should provide additional information about mitigation measures proposed for the impacts to wetlands and woodlands.***

**MAJOR CONDITIONS OF PLANNED REZONING OVERLAY AGREEMENT**

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The Planned Rezoning Overlay process involves a PRO concept plan and specific PRO conditions in conjunction with a rezoning request. The submittal requirements and the process are codified under the PRO ordinance (Section 7.13.2). Within the process, which is completely voluntary by the applicant, the applicant and City Council can agree on a series of conditions to be included as part of the approval.

The applicant is required to submit a conceptual plan and a list of terms that they are willing to include with the PRO agreement. The applicant has submitted a conceptual plan showing the general layout of the internal roads and lots, location of proposed detention pond, location of proposed open space and preserved natural features.. The applicant has provided a narrative describing the proposed public benefits.

**The plan requires further modifications in order to address all staff and consultant comments. The applicant should work with staff to identify appropriate conditions to be included in the PRO agreement.**

**ORDINANCE DEVIATIONS**

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Section 7.13.2.D.i.c(2) permits deviations from the strict interpretation of the Zoning Ordinance within a PRO agreement. These deviations must be accompanied by a finding by City Council that "each Zoning Ordinance provision sought to be deviated would, if the deviation were not granted, prohibit an enhancement of the development that would be in the public interest, and that approving the deviation would be consistent with the Master Plan and compatible with the surrounding areas." Such deviations must be considered by City Council, who will make a finding of whether to include those deviations in a proposed PRO agreement. The proposed PRO agreement would be considered by City Council after tentative approval of the proposed concept plan and rezoning.

The concept plan submitted with an application for a rezoning with a PRO is not required to

contain the same level of detail as a preliminary site plan. Staff has reviewed the concept plan in as much detail as possible to determine what deviations from the Zoning Ordinance are currently shown. The applicant may choose to revise the concept plan to better comply with the standards of the Zoning Ordinance, or may proceed with the plan as submitted with the understanding that those deviations would have to be approved by City Council in a proposed PRO agreement. The following are deviations from the Zoning Ordinance and other applicable ordinances shown on the concept plan. The applicant has submitted a narrative describing the requested deviations. **The applicant should consider submitting supplemental material discussing how if each deviation "...were not granted, [it would] prohibit an enhancement of the development that would be in the public interest, and that approving the deviation would be consistent with the Master Plan and compatible with the surrounding areas."**

1. Planning Deviations:
  - a. Reduction of the minimum required building side setback by 27 feet (Required 10 feet, combined 25 feet, provided 10 feet, combined 20 feet)
  - b. Reduction of the minimum required building rear setback by 27 feet (Required 35 feet, provided 25 feet)
  - c. Reduction of minimum lot size (Required 10,000 square feet, provided 8,640 square feet);
  - d. Reduction of minimum lot width (Required 80 feet, provided 72 feet);
  - e. Reduction of maximum lot coverage (Required 25 percent, provided 40 percent);
2. Engineering DCS Deviations:
  - a. Exceeding the maximum allowed distance of 1,300 feet for intervals between streets to the property boundary.
3. Traffic Deviations:
  - a. Exceeding the maximum length of the cul-de-sac

A landscape plan and elevations are not provided at this point. The applicant is expected to conform to the code. Refer to other review letters for more details on additional information being requested. Further deviations may be identified once more clarification is provided.

#### **APPLICANT BURDEN UNDER PRO ORDINANCE**

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The Planned Rezoning Overlay ordinance requires the applicant to demonstrate that certain requirements and standards are met. The applicant should be prepared to discuss these items, especially in number 1 below, where the ordinance suggests that the enhancement under the PRO request would be unlikely to be achieved or would not be assured without utilizing the Planned Rezoning Overlay. Section 7.13.2.D.ii states the following:

1. (Sec. 7.13.2.D.ii.a) *Approval of the application shall accomplish, among other things, and as determined in the discretion of the City Council, the integration of the proposed land development project with the characteristics of the project area, and result in an enhancement of the project area as compared to the existing zoning, and such enhancement would be unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay.*
2. (Sec. 7.13.2.D.ii.b) *Sufficient conditions shall be included on and in the PRO Plan and PRO Agreement on the basis of which the City Council concludes, in its discretion, that, as compared to the existing zoning and considering the site specific land use proposed by the applicant, it would be in the public interest to grant the Rezoning with Planned Rezoning Overlay; provided, in determining whether approval of a proposed application would be in the public interest, the benefits which would reasonably be expected to accrue from the proposal shall be balanced against, and be found to clearly outweigh the reasonably foreseeable detriments thereof, taking into consideration reasonably accepted planning, engineering, environmental and other principles, as presented to the City Council, following recommendation by the Planning Commission, and also taking into consideration the special knowledge and understanding of the City by the City Council and Planning Commission.*



## **PUBLIC BENEFIT UNDER PRO ORDINANCE**

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Section 7.13.2.D.ii states that the City Council must determine that the proposed PRO rezoning would be in the public interest and the public benefits of the proposed PRO rezoning would clearly outweigh the detriments. The following benefits are being offered by the applicant (as listed in their narrative). **Staff provided comments at the time of Pre-application meeting. The applicant has not made revisions.**

1. Preservation of Natural Features: The proposed layout has been designed to preserve 75% of the on-site high quality woodlands located on the south end of the site. The hedge row along the eastern property line will also be preserved.  
**Staff Comment: The applicant is proposing to fill all the existing wetlands on the property. However, the applicant is proposing to save about 73 percent of high quality woodland areas and the entire length of the existing hedge row along the east side of the property. The applicant should provide additional information about mitigation measures proposed for the impacts to wetlands and woodlands.**
2. Open Space: Oberlin West proposes 46% open space. In addition, the development proposes a minimum 30' buffer surrounding the units on all sides. This allows the perception of large open spaces surrounding the developed area of the site as well as providing the preservation of large contiguous areas of woodland and wetland that exists to the south and west of the property.  
**Staff Comment: Further demonstrate how 30 feet buffer is achieved around the units on all sides. Master plan encourages the use of functional open space in residential development, not just open space. The applicant is seeking a deviation for exceeding the maximum lot coverage.**
3. Pedestrian Nature Trail: The development proposes a pedestrian nature trail that connects to Oberlin East as well as the ITC Trail to the north. This trail system is part of a larger network of trails and paths that extends through the City offering the residents of Oberlin West an opportunity to hike, walk or run through an extensive trail system.  
**Staff Comment: Providing internal connections within neighborhoods and to a corridor trail is a benefit to residents.**
4. Expansion of ITC Trail: The developer is proposing to provide 1,160 linear feet of off-site pedestrian trail to connect to the existing ITC Trail to the north.  
**Staff Comment: City of Novi parks has budgeted for construction of that trail. The applicant should consider alternate options to enhance the trail, such as**
5. Housing Next to School: Novi Middle School is located on the north side of 11 Mile Road north west of the proposed development. The proposed sidewalk in front of the development will connect to the existing sidewalk in front of the school thereby completing a pedestrian network. Residents of the development will be within safe walking distance from home to school.  
**Staff Comment: The site is zoned for and provided on the Future Land Use Map as single family residential and it is intended to be developed as such. It happens to be in close proximity to the school. It is not a benefit offered by the applicant, it is an existing condition.**

**Benefit # 4 would be considered a benefit, but it is scheduled by the City for construction next year. Each of the other proposed benefits do not meet the intent of public benefits as listed in**

the Zoning Ordinance. The Ordinance's intent is to enhance the project area; such enhancement would be unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay. The applicant should reconsider the benefits being proposed.

**NEXT STEP: MASTER PLANNING AND ZONING COMMITTEE**

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If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.735.5607 or [skomaragiri@cityofnovi.org](mailto:skomaragiri@cityofnovi.org).



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Sri Ravali Komaragiri – Planner

**Attachments:**

Planning Review Chart  
Section 3.1.1.B – RA Permitted Uses  
Section 3.1.1.C – RA Special Land Uses

Section 3.1.5.B – R-4 Permitted Uses  
Section 3.1.5.C – R-4 Special Land Uses  
Residential entryway lighting



## PLANNING REVIEW CHART: R-4\_One Family Residential

**Review Date:** October 25, 2017  
**Review Type:** PRO Concept Submittal: Initial  
**Project Name:** **JSP 17-49 OBERLIN WEST**  
**Plan Date:** September 15, 2017  
**Prepared by:** Sri Komaragiri, Planner  
**Contact:** **E-mail:** skomaragiri@cityofnovi.org; **Phone:** (248) 735-5607

Items in **Bold** need to be addressed by the applicant and/or the Planning Commission before approval of the PRO Concept Plan. Underlined items need to be addressed on the Final Site Plan.

Item	Required Code	Proposed	Meets Code	Comments
<b>Zoning and Use Requirements</b>				
<b>Master Plan</b> <i>(adopted August 25, 2010)</i>	Single Family, with master planned 0.8 maximum dwelling units per acre.	23 Unit single family residential development with 1.8 DUA (per Gross site acreage)	No	<b>The density proposed is over the recommended maximum density in Future Land use Map. The site plan should be presented to Master Planning and Zoning Committee.</b>
<b>Zoning</b> <i>(Effective December 25, 2013)</i>	RA: One-Family Residential	R-4: One-Family Residential Site Condominium	Yes	<b>Proposed Planned Rezoning Overlay is subject to City Council approval upon Planning Commission's recommendation</b>
<b>Uses Permitted</b> <i>(Sec.3.1.6)</i>	Single Family Dwellings	Single Family Dwellings	Yes	
<b>Phasing</b>		Phasing is not proposed	Yes	
<b>Rezoning Submittal Requirements</b>				
<b>Written Statement</b> <i>(Site Development Manual)</i>  <i>The statement should describe the following</i>	Potential development under the proposed zoning and current zoning	Narrative is provided	Yes?	<b>Staff provided our interpretation in the review letter</b>
	Identified benefit(s) of the development	Public benefits are identified in the narrative	Yes?	<b>Refer to review letter for staff comments on the proposed benefits</b>
	Conditions proposed for inclusion in the PRO Agreement (i.e., Zoning Ordinance deviations, limitation on total units, etc)	Zoning deviations are listed in the narrative, but not the conditions	Yes?	<b>Applicant will work with staff to identify conditions to be included in PRO agreement</b>
<b>Sign Location Plan</b> <i>(Page 23,SDM)</i>	Installed within 15 days prior to public hearing Located along all road	A sign location plan is not provided	No	

Item	Required Code	Proposed	Meets Code	Comments
	frontages			
<b>Traffic Impact Study</b> (Site development manual)	A Traffic Impact Study as required by the City of Novi Site Plan and Development Manual.	A traffic study is not provided	No	<b>Please contact our Traffic consultant to identify the scope of the required study</b>
<b>Community Impact Statement</b> (Sec. 2.2)	<ul style="list-style-type: none"> <li>- Over 30 acres for permitted non-residential projects</li> <li>- Over 10 acres in size for a special land use</li> <li>- All residential projects with more than 150 units</li> <li>- A mixed-use development, staff shall determine</li> </ul>	Not required	NA	
<b>PRO Agreement</b> (Sec. 7.13.2.D(3))	A PRO Agreement shall be prepared by the City Attorney and the applicant (or designee) and approved by the City Council, and which shall incorporate the PRO Plan and set forth the PRO Conditions and conditions imposed	Not applicable at this moment	NA	<u>PRO Agreement shall be approved by the City Council after the Concept Plan is tentatively approved</u>
<b>For the purpose of the review and to identify the type deviations, the proposed plan will be reviewed against the proposed zoning category (R-4)</b>				
<b>Height, bulk, density and area limitations (Sec. 3.1.5)</b>				
<b>Maximum Dwelling Unit Density</b> (Sec. 3.1.6)	3.3 DUA	1.8 DUA (Gross)	Yes	<b>Recalculate density based on Net site acreage</b>
<b>Minimum Lot Area</b> (Sec 3.1.5)	10,000 square feet	8,600 sq. ft. minimum	No	<b><u>This is considered a deviation.</u></b>  Lots 13 and 15 appear to not meet the minimum 72 ft. Provide a lot table indicating areas for each lot, setbacks, frontage, and lot to depth ratio
<b>Minimum Lot Width</b> (Sec 3.1.5)	80 ft.	72 ft. minimum	No	
<b>Building Setbacks (Sec 3.1.5)</b>				
<b>Front</b>	30 ft.	30 ft.	No	<b><u>This is considered a deviation.</u></b>
<b>Side</b>	10 ft. one side 25 ft. total two sides	10 ft. one side 20 ft. total two sides	No	
<b>Rear</b>	35 ft.	25 ft.	Yes	

Item	Required Code	Proposed	Meets Code	Comments
<b>Maximum % of Lot Area Covered</b> (Sec 3.1.5)	25% (By All Buildings)	40%	Yes	<b><u>This is considered a deviation.</u></b>  Provide an exhibit indicating the maximum lot area covered by all buildings.
<b>Minimum Floor Area</b> (Sec 3.1.5)	1,000 Sq.ft.	Information not provided	N/A	Individual buildings are reviewed as part of the building permit application
<b>Building Height</b> (Sec 3.1.5)	35 ft. or 2.5 stories whichever is less	Information not provided	N/A	
<b>Frontage on a Public Street.</b> (Sec. 5.12)	No lot or parcel of land shall be used for any purpose permitted by this Ordinance unless said lot or parcel shall front directly upon a public street, unless otherwise provided for in this Ordinance.	All units front on a proposed road within the proposed condominium, with access to Eleven Mile	Yes	
<b>Note to District Standards (Sec 3.6)</b>				
<b>Area Requirements</b> (Sec 3.6A & Sec. 2.2)	<ul style="list-style-type: none"> <li>- Lot width shall be measured between two lines where a front setback line intersects with side setback lines.</li> <li>- Distance between side lot lines cannot be less than 90% between the front setback line and the main building.</li> </ul>	Appear to comply	Yes?	<b>Provide lot dimensions on the layout to verify conformance</b>
<b>Additional Setbacks</b> (Sec 3.6B)	NA	Single family development and no off-street parking	NA	
<b>Exterior Side yard abutting Streets</b> (Sec 3.6C)	NA	Side yards abutting residential districts	NA	
<b>Wetland/Water-course Setback</b> (Sec 3.6M)	25ft. from boundary of a wetland and 25ft. from the ordinary high water mark of a watercourse.	The plan proposes to fill an existing wetland. Mitigation is not proposed	No	<b>ECT is currently not recommending approval. Refer to wetlands review for additional comments.</b>
<b>Subdivision Ordinance</b>				

Item	Required Code	Proposed	Meets Code	Comments
<b>Blocks</b> (Subdivision Ordinance: Sec. 4.01)	<ul style="list-style-type: none"> <li>- Maximum length for all blocks shall not exceed 1,400 ft.</li> <li>- Widths of blocks shall be determined by the conditions of the layout.</li> </ul>	Layout appears to be in conformance	Yes	
<b>Lots: Sizes and Shapes</b> (Subdivision Ordinance: Sec. 4.02A)				
<b>Lot Depth Abutting a Secondary Thoroughfare</b> (Subdivision Ordinance: Sec. 4.02.A5)	Lots abutting a major or secondary thoroughfare must have a depth of at least 140'	None of the lots are abutting major or secondary thoroughfare	NA	
<b>Depth to Width Ratio</b> (Subdivision Ordinance: Sec. 4.02.A6)	Single Family lots shall not exceed a 3:1 depth to width ratio	Appear to comply	Yes	<b>Provide a lot table indicating areas for each lot, setbacks, frontage, and lot to depth ratio</b>
<b>Arrangement</b> (Subdivision Ordinance: Sec. 4.02.B)	<ul style="list-style-type: none"> <li>- Every lot shall front or abut on a street.</li> <li>- Side lot lines shall be at right angles or radial to the street lines, or as nearly as possible thereto.</li> </ul>	<ul style="list-style-type: none"> <li>- All lots front on proposed street</li> <li>- All lots conform to shape requirement</li> </ul>	Yes	
<b>Streets</b> (Subdivision Ordinance: Sec. 4.04)	Extend streets to boundary to provide access intervals not to exceed 1,300 ft. unless one of the following exists: <ul style="list-style-type: none"> <li>- practical difficulties because of topographic conditions or natural features</li> <li>- Would create undesirable traffic patterns</li> </ul>	Stub streets are not proposed at 1300 feet interval along property line	No	<b>Refer to Engineering review letter for more details. This is a deviation that can be approved administratively</b>
<b>Topographic Conditions</b> (Subdivision Ordinance Sec 4.03)				
<b>A. Flood plain</b>	Compliance with applicable state laws and City Code Areas in a floodplain cannot be platted	None located on the subject property. A 100 yr floodplain is located on the adjacent property on the south side	NA	
<b>B. Trees and Landscaping</b>	Compliance with Chapter 37 and Article 5 of City Zoning Code	Landscape Plan is not provided	Yes	<b>Refer to Landscape review letter for further details</b>

Item	Required Code	Proposed	Meets Code	Comments
<b>C. Natural Features</b>	To be preserved Lots cannot extend into a wetland or watercourse	The site has wetlands	Yes	<b>ECT is currently not recommending approval. Refer to wetlands review for additional comments.</b>
<b>D. Man-made Features</b>	To be built according to City standards	None Proposed	NA	
<b>E. Open Space Areas</b>	Any Open Space Area shall meet the following: <ul style="list-style-type: none"> <li>- Require performance guarantee</li> <li>- Shall be brought to a suitable grade</li> <li>- Compliance with zoning ordinance</li> <li>- Except for wooded areas, all ground area should be top dressed with a minimum of 25% of red fescue and a maximum of 20% perennial rye.</li> </ul>	The open space that is provided will need to meet these standards.	Yes	
<b>F. Non-Access Greenbelt Easements</b>	For lots abutting major thoroughfares <ul style="list-style-type: none"> <li>- Shall be 15 feet wide</li> <li>- Shall be 20 feet wide where power lines exist</li> </ul>	Non-access greenbelt is not shown. Landscape plan is not provided	No	<b>Landscape Subdivision code requires a 40 ft. non-access greenbelt easement.</b>  <b>Show the required 40' non-access greenbelt easement on the plans</b>
<b>G. Zoning Boundary Screening</b>	A non-residential development abutting a residential development would need screening	Subject property is not abutting any non-residential development	NA	
<b>Sidewalks Requirements</b>				
<b>Non-Motorized Plan</b>	Eleven mile west of ITC corridor and Wixom road is identified as a Major corridor in the Non-motorized master plan. It is also identified as a potential road for adding bike lanes. The plan also proposed a mid-block crossing at the intersection of ITC corridor trail and Eleven Mile Road	The applicant did propose to build a segment of ITC trail east of the subject property. However, it is already funded for construction.	No	<b>The applicant can consider the following options while revising public benefits</b> <ul style="list-style-type: none"> <li>- Midblock crossing at intersection of ITC trail and Eleven Mile Road</li> <li>- Construction of a boardwalk</li> </ul>

Item	Required Code	Proposed	Meets Code	Comments
<b>Sidewalks</b> <i>Article XI: Off-Road Non-Motorized Facilities in Chapter 11 of City Code of Ordinances</i>	Five (5) foot wide concrete sidewalks are required on both sides of all internal streets  An 8' pathway is required along 11 Mile Road	Proposed	Yes?	<b>Label the width of the sidewalks proposed</b>
<b>Building Code and other design standard Requirements</b>				
<b>Building Code</b>	Building exits must be connected to sidewalk system or parking lot.	Not Applicable.	NA	<b>Building Code</b>
<b>Design and Construction Standards Manual (DSM)</b>	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Not provided.	<b>No</b>	
<b>General layout and dimension of proposed physical improvements</b>	Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).	Some dimensions are missing.	<b>No</b>	
<b>Other Requirements</b>				
<b>Residential Entryway Lighting</b>	A residential development entrance light must be provided at the entrances to the development off of Dixon Road	None indicated	No	
<b>Development and Street Names</b>	Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval	Projects and street names are not approved yet	No	<b>Please submit the application for review and approval of development and street names</b>
<b>Economic Impact Information</b>	- Total cost of the proposed building & site improvements - Home size & expected sales price of new homes			



Item	Required Code	Proposed	Meets Code	Comments
<b>Legal Requirements</b>				
<b>Property Split or Combination</b>	Property combination or split shall be reviewed and approved by the Community Development Department.	Not applicable	NA	
<b>Development/ Business Sign</b>	Sign permit applications that relate to construction of a new building or an addition to an existing building may submitted, reviewed, and approved as part of a site plan application. Refer to Planning review for more details	Signage is not indicated	Yes/No	<b>Please show tentative location of signage . If you intend to seek any deviations for signage, we recommend you seek them prior to PRO agreement approval. For sign permit information contact Ordinance at <a href="tel:248-735-5678">248-735-5678</a></b>
<b>Master Deed</b>	A draft master deed is required at the time of electronic stamping sets	Not required at this time	Yes/No	<b>Please submit a draft <u>Master Deed including buffers and other easement at the time of electronic stamping sets</u></b>
<b>Conservation Easements</b>	The Applicant shall provide preservation/conservation easements for any areas of remaining wetlands and woodland.	Wetland and Woodland Conservation easements are required		<b>Refer to woodlands review letter for more details.</b>  <u>Applicant is required to submit the drafts prior to stamping sets approval</u>
<b>NOTES:</b>				
<ol style="list-style-type: none"> <li>1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.</li> <li>2. The section of the applicable ordinance or standard is indicated in parenthesis. Please refer to those sections in Article 3, 4 and 5 of the zoning ordinance for further details.</li> <li>3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.</li> </ol>				

### 3.1.1

# RA Residential Acreage

## A. INTENT

The RA, Residential Acreage district is intended to provide areas within the community for a particular living environment characterized by large lot, low density, single-family dwellings.

**i** **User Note:** For uses listed in **bold blue**, refer to Article 4, or click on use, for use-specific standards

## B. PRINCIPAL PERMITTED USES

- i. One-family dwellings
- ii. **Farms** and **greenhouses** § 4.1
- iii. Publicly owned and operated parks, parkways and outdoor recreational facilities
- iv. **Public, parochial and other private elementary schools** § 4.3
- v. **Home occupations**
- vi. **Family day care homes** § 4.5
- vii. **Accessory buildings and uses** § 4.19 customarily incidental to any of the above use

## C. SPECIAL LAND USES

- i. **Raising of nursery plant materials** § 4.6
- ii. **Dairies** § 4.7
- iii. **Keeping and raising of livestock** § 4.8
- iv. **Places of worship** § 4.10
- v. **Public, parochial and private elementary, intermediate or secondary schools** § 4.3
- vi. **Utility and public service buildings and uses (without storage yards)** § 4.11
- vii. **Group day care homes, day care centers, and adult day care** § 4.12.1
- viii. **Private noncommercial recreational areas, institutional or community recreation centers, nonprofit swimming pool clubs** § 4.13
- ix. **Golf courses** § 4.14
- x. **Colleges, universities and other such institutions of higher learning** § 4.15.1
- xi. **Private pools** § 4.16
- xii. **Cemeteries** § 4.2
- xiii. Railroad right-of-way, but not including terminal freight facilities, transfer and storage tracks
- xiv. **Mortuary establishments** § 4.17
- xv. **Bed and breakfasts** § 4.18
- xvi. **Limited nonresidential use of historic buildings** § 4.9
- xvii. **Accessory buildings and uses** § 4.19 customarily incidental to any of the above permitted uses



# RA Residential Acreage

3.1.1

## E. DEVELOPMENT STANDARDS

### Lot Size

Minimum lot area<sup>Ⓜ</sup>: 1 acre  
 Minimum lot width<sup>Ⓜ</sup>: 150 ft

### Lot Coverage<sup>Ⓜ</sup>

Maximum lot coverage (by all buildings): 25%

### Setbacks<sup>Ⓜ</sup>

Minimum front yard setback: 45 ft  
 Minimum rear yard setback: 50 ft  
 Minimum side yard setback: 20 ft one side  
 50 ft total two sides

### Building Height<sup>Ⓜ</sup>

Maximum building height: 35 ft or 2.5 stories, whichever is less

### Floor Area<sup>Ⓜ</sup>

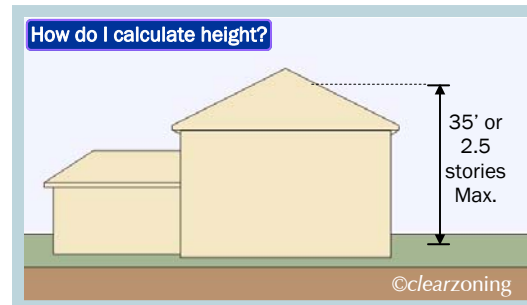
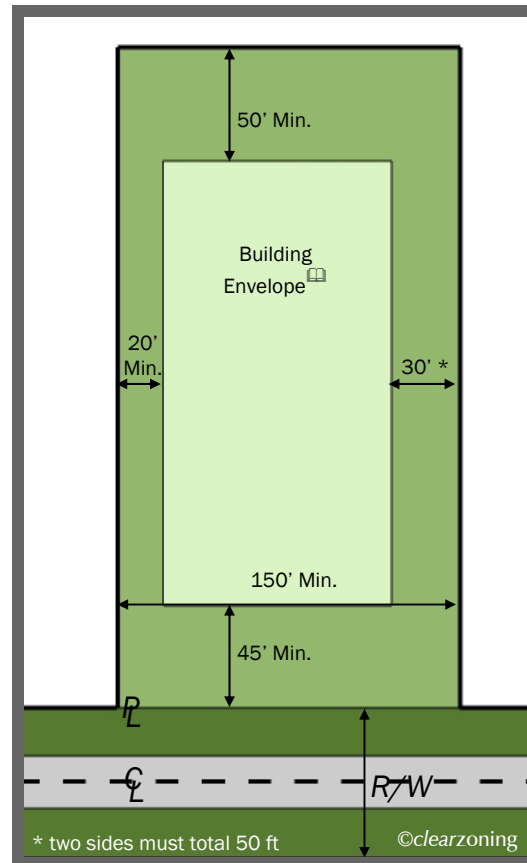
Minimum floor area per unit<sup>Ⓜ</sup>: 1,000 sq ft

### Dwelling Unit Density

Maximum density  
 DU's/Net Site Area: 0.8

### NOTES

- For additions to the above requirements, refer to [Section 3.6.2 Notes to District Standards: A, B, C, and M](#)
- See *Selected References* below for applicability



The above drawings are not to scale.

## SELECTED REFERENCES

### 3. Zoning Districts

- [RA, R-1, R-2, R-3, and R-4 Required Conditions](#) §3.7
- [RUD Residential Unit Development](#) §3.29
- [Open Space Preservation Option](#) §3.30

### 4. Use Standards

- [Keeping of Cats and Dogs](#) § 4.83
- [Uses Not Otherwise Included](#) § 4.86
- [Unlisted Use Determination](#) § 4.87

### 5. Site Standards

- [Commercial and Recreational Vehicle Parking](#) § 5.1
- [Off-street Parking Requirements](#) § 5.2
- [Off-street Parking Layout, Standards...](#) § 5.3
- [Off-street Loading and Unloading](#) § 5.4
- [Landscape Standards](#) § 5.5
- [Signs](#) § 5.6
- [Exterior Lighting](#) § 5.7
- [Residential Entryways](#) § 5.8
- [Corner Clearance](#) § 5.9
- [Additional Road Design](#) § 5.10

- [Fences](#) § 5.11
- [Frontage on a Public Street](#) § 5.12
- [Performance Standards](#) § 5.14
- [Exterior Building Wall Facade Materials](#) § 5.15
- [Bike Parking Facility Requirements](#) § 5.16

### 6. Development Procedures

- [Site Plan Review](#) § 6.1
- [Public Hearing](#) § 6.2

### 7. Admin. and Enforcement

- [Nonconformities](#) § 7.1
- [Planned Rezoning Overlay](#) § 7.13.2

1 Purpose and Introduction

2 Definitions

3 Zoning Districts

4 Use Standards

5 Site Standards

6 Development Procedures

7 Admin and Enforcement



# R-4 One-Family Residential District

1 Purpose and Introduction

1

2 Definitions

2

3 Zoning Districts

4 Use Standards

5 Site Standards

6 Development Procedures

7 Admin and Enforcement

7

## A. INTENT

The R-4, One-Family Residential district is intended to provide for an environment of predominantly low-density, one-family detached dwellings along with other residentially related facilities which serve the residents in the district.



**User Note:** For uses listed in **bold blue**, refer to Article 4, or click on use, for use-specific standards

## B. PRINCIPAL PERMITTED USES

- i. One-family detached dwellings
- ii. **Farms** and **greenhouses** § 4.1
- iii. Publicly owned and operated parks, parkways and outdoor recreational facilities
- iv. **Home occupations** § 4.4
- v. **Keeping of horses and ponies** § 4.8
- vi. **Family day care homes** § 4.5
- vii. **Accessory buildings and uses** § 4.19 customarily incident to any of the above uses

## C. SPECIAL LAND USES

- i. **Places of worship** § 4.10
- ii. **Public, parochial and private elementary, intermediate or secondary schools** § 4.3.2
- iii. **Utility and public service buildings and uses (without storage yards)** § 4.11
- iv. **Group day care homes** , **day care centers** , and **adult day care** § 4.12.1
- v. **Private noncommercial recreational areas, institutional or community recreation centers, nonprofit swimming pool clubs** § 4.13
- vi. **Golf courses** § 4.14
- vii. **Colleges, universities and other such institutions of higher learning** § 4.15.1
- viii. **Private pools** § 4.16
- ix. **Cemeteries** § 4.2
- x. Railroad right-of-way, but not including terminal freight facilities, transfer and storage tracks
- xi. **Mortuary establishments** § 4.17
- xii. **Bed and breakfasts** § 4.18
- xiii. **Accessory buildings and uses** § 4.19 customarily incident to any of the above permitted uses



# R-4 One-Family Residential District

3.1.5

## D. DEVELOPMENT STANDARDS

### Lot Size

Minimum lot area<sup>Ⓜ</sup>: 10,000 sq ft  
 Minimum lot width<sup>Ⓜ</sup>: 80 ft

### Lot Coverage<sup>Ⓜ</sup>

Maximum lot coverage: 25%

### Setbacks<sup>Ⓜ</sup>

Minimum front yard setback: 30 ft  
 Minimum rear yard setback: 35 ft  
 Minimum side yard setback: 10 ft one side  
 25 ft total two sides

### Building Height<sup>Ⓜ</sup>

Maximum building height: 35 ft or 2.5 stories, whichever is less

### Floor Area<sup>Ⓜ</sup>

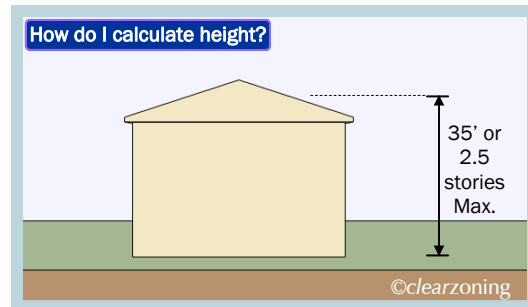
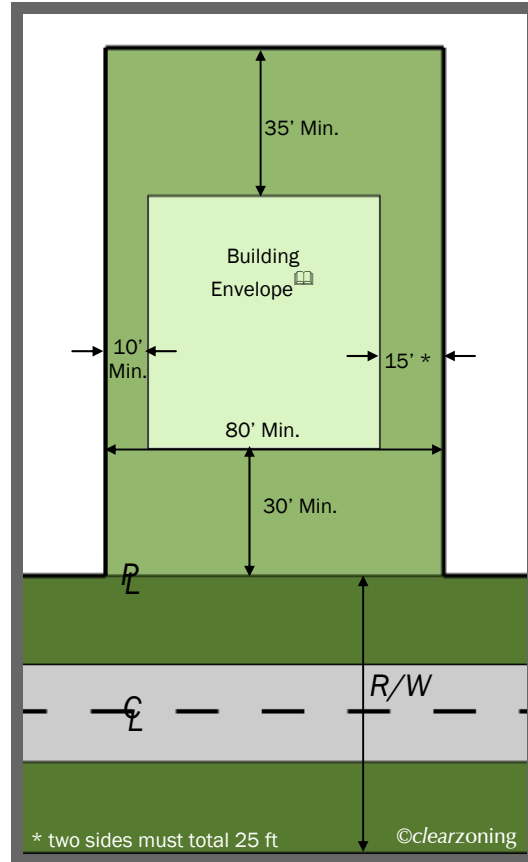
Minimum floor area per unit<sup>Ⓜ</sup>: 1,000 sq ft

### Dwelling Unit Density

Maximum density  
 DU's/Net Site Area: 3.3

### NOTES

- For additions to the above requirements, refer to [Section 3.6.2 Notes to District Standards: A, B, C, and M](#)
- See *Selected References* below for applicability



The above drawings are not to scale.

## SELECTED REFERENCES

### 3. Zoning Districts

- [RA, R-1, R-2, R-3, and R-4 Required Conditions](#) § 3.7
- [One-Family Clustering Option](#) §3.28
- [Open Space Preservation Option](#) §3.30

### 4. Use Standards

- [Keeping of Cats and Dogs](#) § 4.83
- [Uses Not Otherwise Included](#) § 4.86
- [Unlisted Use Determination](#) § 4.87

### 5. Site Standards

- [Commercial and Recreational Vehicle Parking](#) § 5.1
- [Off-street Parking Requirements](#) § 5.2
- [Off-street Parking Layout, Standards...](#) § 5.3
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- [Landscape Standards](#) § 5.5
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- [Exterior Building Wall Facade Materials](#) § 5.15
- [Bike Parking Facility Requirements](#) § 5.16

### 6. Development Procedures

- [Site Plan Review](#) § 6.1
- [Public Hearing](#) § 6.2

### 7. Admin. and Enforcement

- [Nonconformities](#) § 7.1
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5 Site Standards

6 Development Procedures

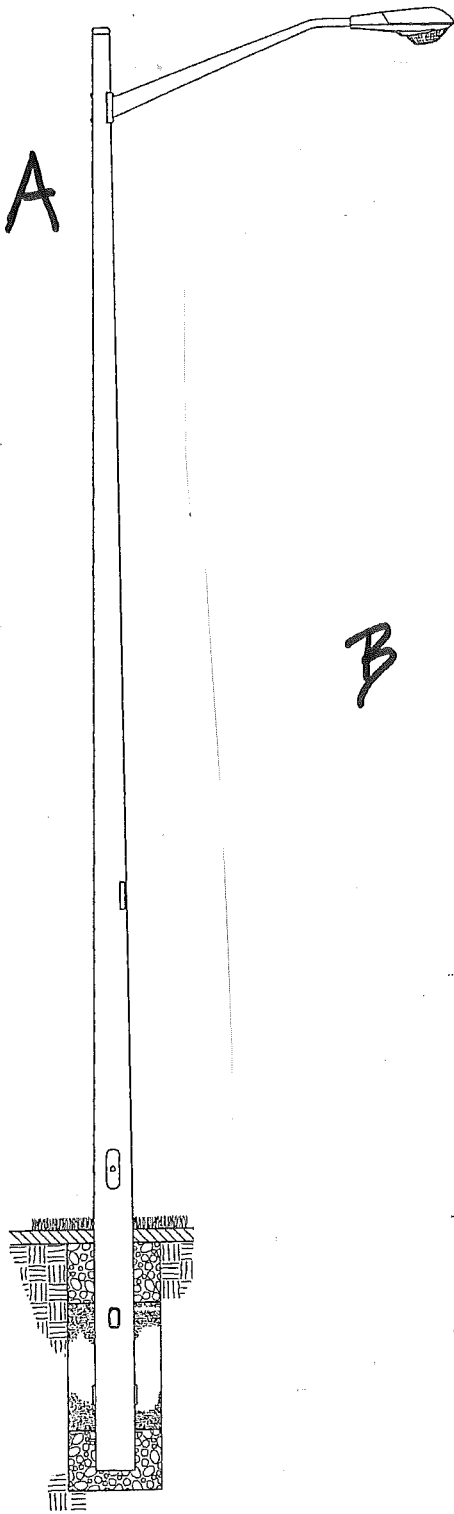
7 Admin and Enforcement



## RESIDENTIAL ENTRYWAY LIGHTING

1. One light per entrance is required by the City.
2. City pays for one (1) light per entrance if you chose Option A.
3. Any of the three decorative options (referred to as DTE lights) listed in the attached PDF will be developer's responsibility.
4. Street lights within public right of way have to be one of the four in the PDF.
5. Private street lighting, which is developers responsibility does not have to be one of the four options. If you chose to use the DTE lights within the development along private streets, you need to work with the City.
6. Refer to Section 5.7 EXTERIOR LIGHTING of our zoning ordinance for other applicable standards
7. You can contact Darcy Rechtein at [248.735.5695](tel:248.735.5695) for further details.
8. See attached lighting options.

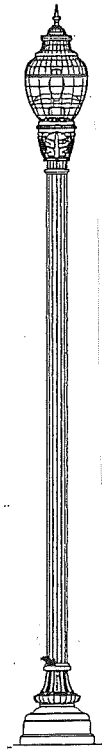
# RESIDENTIAL DEVELOPMENT ENTRANCE LIGHTING OPTIONS



SILVER  
 CODE 80 - 30'  
 CODE 81 - 30' DUAL  
 CODE 82 - 40'  
 CODE 83 - 40' DUAL

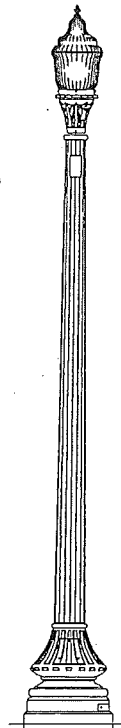
BLACK  
 CODE 70 - 30'  
 CODE 71 - 30' DUAL  
 CODE 72 - 40'  
 CODE 73 - 40' DUAL

B



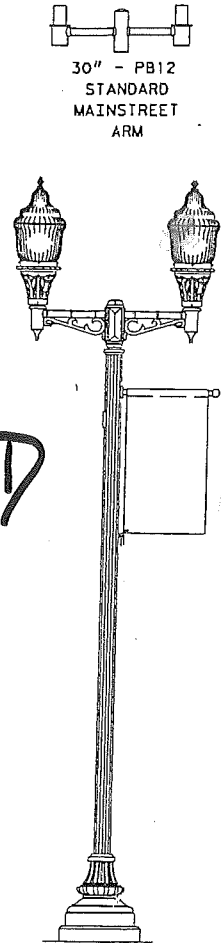
12'  
 5" DIA.  
 HAZEL PARK  
 WADSWORTH  
 POST &  
 WASHINGTON  
 POSTLITE

C



12'  
 MAINSTREET  
 POST W/  
 GRANVILLE  
 LUMINAIRE  
 & LEAF  
 HOUSING

D



12'  
 WADSWORTH  
 POST W/  
 GRANVILLE  
 LEAF LUM'S,  
 BANNER ARM,  
 TIE DOWN &  
 MAINSTREET  
 38" PB32  
 DECORATIVE  
 ARM

30" - PB12  
 STANDARD  
 MAINSTREET  
 ARM

## ENGINEERING REVIEW





# PLAN REVIEW CENTER REPORT

October 17, 2017

## Engineering Review

Oberlin West PRO Concept Plan  
JSP17-0049

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### Applicant

Atwell

### Review Type

Preliminary Site Plan

### Property Characteristics

- Site Location: South of Eleven Mile Road, East of Wixom Road
- Site Size: 12.85 acres
- Plan Date: 09/15/2017
- Design Engineer: Atwell

### Project Summary

- Construction of a 23-unit single family site condominium with a public roadway.
- Water service would be provided by an 8-inch extension from the existing 16-inch water main along the south side of 11 Mile Road.
- Sanitary sewer service would be provided by connecting to the Oberlin Phase 1 site on the south side of 11 Mile Road.
- Storm water would be collected by a single storm sewer collection system, detained on-site, and discharged at the west property line.

### Recommendation:

## **LEFT BLANK ON PURPOSE**

### Comments:

The Concept Plan does not meet the general requirements of Chapter 11, the Storm Water Management Ordinance and Engineering Design Manual. The following items should be addressed with a revised concept plan submittal:

1. Refer to section 5.3 of the Engineering Design Manual for storm water quality performance standards. A sediment forebay or wet detention basin with permanent water surface must be provided for the first flush volume for pre-treatment of storm water.

Additional comments to be addressed prior to revised concept plan submittal:

General

2. **No stub streets have been provided to adjoining properties as required by Section 4.04-A.1.(b) of the Subdivision Ordinance. Provide a stub street, or request a variance.**
3. An 8-foot wide pathway is required along the frontage of the site. Five-foot sidewalks are required on both sides of the interior street.
4. Show and label the master planned 60-foot half right-of-way width for Eleven Mile Road. The master-planned half right-of-way width should be dedicated as part of the project. Show the additional right-of-way width to be dedicated along Eleven Mile Road labeled as "proposed" right-of-way.
5. Soil borings shall be provided for a preliminary review of the constructability of the proposed development (roads, basin, etc.). Borings identifying soil types, and groundwater elevation should be provided at the time of Preliminary Site plan.
6. Provide an emergency access gate at both ends of the proposed emergency access drive.
7. The location of the emergency access drive requires an off-site emergency access easement.
8. A letter from either the applicant or the applicant's engineer must be submitted with the Preliminary Site Plan submittal highlighting the changes made to the plans addressing each of the comments in this review.

Water Main

9. Provide size and material of proposed water main in the development.
10. A 20-foot public water main easement is required and should be shown on the plans.
11. Calculations are required to prove adequate water pressure at the dead end and a stub must be provided to accommodate a second connection to the west when made available. Alternatively, a looped system could be considered to the Oberlin Phase 1 site through the ITC corridor.

Sanitary Sewer

12. Provide a note on the plans that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.
13. Provide a note on the Utility Plan stating that sanitary leads shall be buried at least 5 feet deep where under the influence of pavement.
14. A 20-foot public sanitary sewer easement is required and should be shown on the plans.
15. A sanitary sewer stub may be required at the western property line for future connection unless it is determined that the properties currently not served can be better served otherwise.

16. The Master Plan for Land Use indicates RA as the master planned land use for this site, with a density of 0.8 Residential Equivalent Units (REU) per acre. The applicant is requesting a Planned Rezoning Overlay to rezone to R-4 with a density of 3.3 REU per acre. The City's existing infrastructure has sufficient capacity to accommodate the increased density in this proposed development, however, any time parcels are rezoned to a use that results in a higher sanitary sewer discharge, acquisition of additional contractual sewer capacity downstream of Eight Mile Road may be required at the time of build-out.

#### Paving and Grading

17. **The maximum cul-de-sac street length for this type of development is 800 feet. Revise the layout, or request a variance from Design and Construction Standards.**
18. Provide a preliminary grading plan.

#### Storm sewer

19. Provide a preliminary storm sewer layout.
20. Capture all runoff in the development area including all rear-yard drainage and route to on-site detention basin.
21. A minimum cover depth of 3 feet shall be maintained over all storm sewers.

#### Storm Water Management Plan

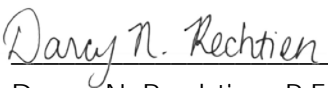
22. Provide a sheet or sheets titled "Storm Water Management Plan" (SWMP) that complies with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual (refer to the runoff coefficients, 1V:4H allowable basin slopes, etc.).
23. The SWMP must detail the storm water system design, calculations, details, and maintenance as stated in the ordinance. The SWMP must address the discharge of storm water off-site, and evidence of its adequacy must be provided. This should be done by comparing pre- and post-development discharge rates. The area being used for this off-site discharge should be delineated and the ultimate location of discharge shown.
24. An off-site drainage easement may be required if there will be an increase in concentration or velocity of storm water discharge to the receiving property.
25. Refer to section 5.3 of the Engineering Design Manual for storm water quality performance standards. A sediment forebay or wet detention basin with permanent water surface must be provided for the first flush volume for pre-treatment of storm water.
26. An adequate maintenance access route to the basin outlet structure and any other pretreatment structures shall be provided (15 feet wide, maximum slope of 1V:5H, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.

27. Provide a 5-foot wide stone bridge allowing direct access to the standpipe from the bank of the basin during high-water conditions (i.e. stone 6-inches above high water elevation). Provide a detail and/or note as necessary.
28. Provide an access easement for maintenance over the storm water detention system and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.

Off-Site Easements

29. Any off-site easements must be executed prior to final approval of the plans. Drafts shall be submitted at the time of the Preliminary Site Plan submittal.
  - a. Off-site emergency access easement in the ITC corridor.
  - b. Temporary off-site grading easement in the ITC corridor.

Please contact Darcy Rechten at (248) 735-5695 with any questions.



\_\_\_\_\_  
Darcy N. Rechten, P.E.

## LANDSCAPE REVIEW

## LANDSCAPE REVIEW SUMMARY CHART

**Review Date:** October 9, 2017  
**Project Name:** JSP17 – 0049: OBERLIN WEST PRO CONCEPT  
**Plan Date:** September 15, 2017  
**Prepared by:** Rick Meader, Landscape Architect E-mail: [rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org);  
 Phone: (248) 735-5621

Items in **Bold** need to be addressed by the applicant before approval of the Preliminary Site Plan.  
Underlined items need to be addressed for Final Site Plan.

**DEVIATIONS:** A landscape plan is not provided in the plan set. Without a landscape plan, no determination can be made of any landscape deviations that may be required with this project. Unless a plan is provided, it is assumed that the project will conform to all current city landscaping ordinances and standards.

Item	Required	Proposed	Meets Code	Comments
<b>Landscape Plan Requirements (LDM (2))</b>				
<b>Landscape Plan</b> <i>(Zoning Sec 5.5.2, LDM 2.e.)</i>	§ New commercial or residential developments § Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less. § 1"=20' minimum with proper North. Variations from this scale can be approved by LA § Consistent with plans throughout set	No	No	1. Overall plan 1"=50' 2. This would be acceptable, unless entry landscaping is detailed. <b>3. Please provide a separate landscape plan showing all required plantings, notes, details and calculations.</b>
<b>Project Information</b> <i>(LDM 2.d.)</i>	Name and Address	No	No	<b>Provide on landscape plan.</b>
<b>Owner/Developer Contact Information</b> <i>(LDM 2.a.)</i>	Name, address and telephone number of the owner and developer or association	Yes	Yes	<b>Provide on landscape plan.</b>
<b>Landscape Architect contact information</b> <i>(LDM 2.b.)</i>	Name, Address and telephone number of RLA/LLA	No	No	<b>Landscape plan must be created by landscape architect.</b>
<b>Sealed by LA.</b> <i>(LDM 2.g.)</i>	Requires original signature	No	No	<u>Required for Final Site Plan.</u>
<b>Miss Dig Note</b> <i>(800) 482-7171 (LDM.3.a.(8))</i>	Show on all plan sheets	Yes	Yes	<b>Provided on site plan. Please include on landscape plan.</b>
<b>Zoning</b> <i>(LDM 2.f.)</i>	Include all adjacent zoning	Site: RA Proposed: R-4 w/PRO East: RA (ITC Corridor)	No	<b>Provide on landscape plan.</b>

Item	Required	Proposed	Meets Code	Comments
		South, West: RA North: RA-PSLR		
<b>Survey information</b> (LDM 2.c.)	§ Legal description or boundary line survey § Existing topography	Topo on Sheet 02 No description	No	<b>Provide property description in plan set.</b>
<b>Existing plant material</b> <b>Existing woodlands or wetlands</b> (LDM 2.e.(2))	§ Show location type and size. Label to be saved or removed. § Plan shall state if none exists.	Woodland edge and general character of woods provided.	No	1. Please add tree survey of all trees 8" dbh or larger. 2. Please add designations of trees to be removed on plans (eg X on trees to be removed).
<b>Soil types</b> (LDM.2.r.)	§ As determined by Soils survey of Oakland county § Show types, boundaries	No	No	<b>Please add to plan set.</b>
<b>Existing and proposed improvements</b> (LDM 2.e.(4))	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Yes	Yes	
<b>Existing and proposed utilities</b> (LDM 2.e.(4))	Overhead and underground utilities, including hydrants	No	No	<b>Please adjust proposed utility lines to minimize conflicts with required landscaping, especially interior street trees.</b>
<b>Proposed grading. 2' contour minimum</b> (LDM 2.e.(1))	Provide proposed contours at 2' interval	Yes	Yes	<b>Berms along 11 Mile Road will be required. See below.</b>
<b>Snow deposit</b> (LDM.2.q.)	Show snow deposit areas on plan	No	No	<b>Please show areas for snow deposits on landscape plan where the snow won't harm plant material.</b>
<b>LANDSCAPING REQUIREMENTS</b>				
<b>Parking Area Landscape Requirements LDM 1.c. &amp; Calculations (LDM 2.o.)</b>				
<b>General requirements</b> (LDM 1.c)	§ Clear sight distance within parking islands § No evergreen trees	NA		
<b>Name, type and number of ground cover</b> (LDM 1.c.(5))	As proposed on planting islands	NA		
<b>General (Zoning Sec 5.5.3.C.ii)</b>				
<b>Parking lot Islands</b> (a, b. i)	§ A minimum of 300 SF to qualify § 6" curbs	NA		

Item	Required	Proposed	Meets Code	Comments
	§ Islands minimum width 10' BOC to BOC			
<b>Curbs and Parking stall reduction (c)</b>	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	NA		
<b>Contiguous space limit (i)</b>	Maximum of 15 contiguous spaces	NA –no parking bays are provided.		
<b>Plantings around Fire Hydrant (d)</b>	No plantings with matured height greater than 12' within 10 ft. of fire hydrants	Some trees may be close to hydrants, manholes – can't tell at present.	No	<ol style="list-style-type: none"> <li>1. Please show all proposed hydrants and utility structures on landscape plan.</li> <li>2. Keep all trees and large shrubs at least 10' away from hydrants, catch basins and manholes.</li> </ol>
<b>Landscaped area (g)</b>	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	NA		
<b>Clear Zones (LDM 2.3.(5))</b>	25 ft corner clearance required. Refer to Zoning Section 5.5.9			Please show clear vision zones at Eleven Mile Road entry on landscape plan and keep trees outside of that zone.
<b>Berms, Walls and ROW Planting Requirements</b>				
<b>Berms</b>				
§ All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours § Berm should be located on lot line except in conflict with utilities. § Berms should be constructed of loam with a 6" top layer of top soil.				
<b>Residential Adjacent to Non-residential (Zoning Sec 5.5.3.A and LDM 1.a)</b>				
<b>Berm requirements (Zoning Sec 5.5.A)</b>	Adjacent Zoning is RA	NA		
<b>Planting requirements (LDM 1.a.)</b>	LDM Novi Street Tree List	NA		
<b>Adjacent to Public Rights-of-Way (Zoning Sec 5.5.3.A and LDM 1.b)</b>				
<b>Cross-Section of Berms (Zoning Sec 5.5.3.B and LDM 2.j)</b>				
Slope, height and width (Zoning Sec 5.5.3.A.v)	§ Label contour lines § Maximum 33% slope § Min. 4 feet crest § Min 4 feet tall, variable § Constructed of loam with 6" top layer of topsoil	No	No	Please add detail.



Item	Required	Proposed	Meets Code	Comments
Type of Ground Cover		No	No	Please indicate all areas as sod, seed or some other groundcover.
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	No	No	Please show any overhead utilities – existing or proposed, and dimension closest trees.
<b>Walls (LDM 2.k &amp; Zoning Sec 5.5.3.vi)</b>				
<b>Material, height and type of construction footing</b>	Freestanding walls should have brick or stone exterior with masonry or concrete interior	None proposed		
<b>Walls greater than 3 ½ ft. should be designed and sealed by an Engineer</b>		NA		
<b>ROW Landscape Screening Requirements (Sec 5.5.3.B. ii)</b>				
<b>Greenbelt width (2)(3) (5)</b>	34 ft ???	48 ft	Yes	
Min. berm crest width	4 ft.	No	No	Please provide required undulating berm.
Minimum berm height (9)	4 ft.	No	No	1. See above. 2. Minimum height is to be 4 feet.
3' wall (4) (7)	NA	No		
<b>Canopy deciduous or large evergreen trees</b> Notes (1) (10) LDM1.d.(1)(b)	§ 1 tree per 40 l.f.; § (425-72)/40 = 9 trees	0 trees	No	1. Please provide calculations. 2. Please provide required trees. 3. Please label trees uniquely as greenbelt trees.
<b>Sub-canopy deciduous trees</b> Notes (2)(10)	§ 1 tree per 25 l.f.; § (425-72)/25 = 14 trees	0 trees	No	See above
<b>Street Trees</b> (LDM 1.d.(1) and Novi Street Tree List))	§ 11 Mile Rd: 1 per 35 l.f. § (425-72)/25 = 14 trees § Internal lots – trees set by frontage – see table in LDM	<u>11 Mile Road:</u> 0 trees  <u>Lots:</u> 0 trees	No	1. Please provide calculations. 2. Please provide required trees. 3. Please label trees uniquely as street trees.
<b>Island &amp; Boulevard Planting</b> (Zoning Sec & LDM 1.d.(1)(e))	§ Must be landscaped & irrigated § Mix of canopy/sub-canopy trees, shrubs,	None		1. A mix of canopy and subcanopy trees, shrubs, groundcovers etc. is required for

Item	Required	Proposed	Meets Code	Comments
	groundcovers, etc. § No plant materials between heights of 3-6 feet as measured from street grade			75% of the island area for all islands. 2. Islands trees do not count as street trees.
<b>Transformers/Utility boxes</b> (LDM 1.e from 1 through 5)	§ A minimum of 2ft. separation between box and the plants § Ground cover below 4" is allowed up to pad. § No plant materials within 8 ft. from the doors	None		1. When location of transformer/utility boxes is determined, add landscaping per city requirements. 2. Add note to the plan stating that all utility boxes shall be screened. 3. Add planting detail to plans.
<b>Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)</b>				
<b>Planting requirements</b> (Sec. 5.5.3.E.iv)	§ Clusters of large native shrubs (min 3 ft tall) shall cover 70-75% of the basin rim area § 10" to 14" tall grass along sides of basin § Refer to wetland for basin mix	No detention landscaping provided.	No	1. Please provide required landscaping. 2. Please provide seed mix list on plans, not just name.
<b>Woodland Replacements (Chapter 37 Woodlands Protection)</b>				
<b>Woodland Replacement Calculations – Required/Provided</b>	§ Show calculations based on existing tree chart. § Indicate boundary of regulated woodland on plan	§ Extent of regulated woodland boundaries is not clearly indicated in plans. § Tree chart showing trees to be removed must be provided.	No	1. Please provide tree chart showing tree species, size (dbh), whether it is being removed or saved. 2. Please provide woodland replacement calculations, replacement trees provided and any deposit to the tree fund to be made.
<b>Woodland Replacement Trees Proposed</b>	§ Show clearly on plan and plant list which trees are proposed as woodland replacement trees § Reforestation credit table breakdown, if applicable	None	No	1. Please uniquely label any woodland replacement trees for verification. 2. Please keep tree tag labels of existing trees to remain on landscape plan.
<b>LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS</b>				
<b>Landscape Notes – Utilize City of Novi Standard Notes</b>				
Installation date	Provide intended date	No	No	Please add dates to

Item	Required	Proposed	Meets Code	Comments
(LDM 2.i. & Zoning Sec 5.5.5.B)				landscape plan.
<b>Maintenance &amp; Statement of intent</b> (LDM 2.m & Zoning Sec 5.5.6)	§ Include statement of intent to install and guarantee all materials for 2 years. § Include a minimum one cultivation in June, July and August for the 2-year warranty period.	No	No	Please add notes to landscape plan.
<b>Plant source</b> (LDM 2.n & LDM 3.a.(2))	Shall be northern nursery grown, No.1 grade	No	No	Please add note to landscape plan.
<b>Irrigation plan</b> (LDM 2.s.)	A fully automatic irrigation system or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans.	No	No	1. <u>Please add irrigation plan or information as to how plants will be watered sufficiently for establishment and long- term survival.</u> 2. <u>If xeriscaping is used, please provide information about plantings included.</u>
<b>Other information</b> (LDM 2.u)	Required by Planning Commission	NA		
<b>Establishment period</b> (Zoning Sec 5.5.6.B)	<b>2 yr. Guarantee</b>	No	No	Please add note to landscape plan.
<b>Approval of substitutions.</b> (Zoning Sec 5.5.5.E)	City must approve any substitutions in writing prior to installation.	No	No	Please add note to landscape plan.
<b>Plant List (LDM 2.h.) – Include all cost estimates</b>				
Botanical and common names	Refer to LDM suggested plant list	No	No	Please include plant list on landscape plan.
Quantities and sizes		No	No	Include in plant list
Root type		No	No	
Botanical and common names		No	No	
Breakdown of genus/species diversity (LDM 1.d.(1).d.	Break down proposed plantings by genus and species	No	No	Please be sure that diversity of plantings conforms with standard listed in Design Manual
Type and amount of lawn		No		<u>Please indicate on plan areas of sod and seed or other ground cover.</u>
Cost estimate (LDM 2.t)	For all new plantings, mulch and sod as listed on the plan	No		<u>Need for Final Site Plan</u>

Item	Required	Proposed	Meets Code	Comments
<b>Planting Details/Info (LDM 2.i) – Utilize City of Novi Standard Details</b>				
Canopy Deciduous Tree	Refer to LDM for detail drawings	No	No	1. Please provide detail if required. 2. Standard City of Novi Detail Sheet is available upon request.
Multi-stem Tree		No	No	See above
Evergreen Tree		No	No	See above
Shrub		No	No	See above
Perennial/ Ground Cover		No	No	See above
Tree stakes and guys. (Wood stakes, fabric guys)		No	No	See above
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	No	No	Detail should show fence at 1 foot outside of tree dripline.
<b>Other Plant Material Requirements (LDM 3)</b>				
<b>General Conditions (LDM 3.a)</b>	Plant materials shall not be planted within 4 ft. of property line	No	No	Please add note near property lines.
<b>Plant Materials &amp; Existing Plant Material (LDM 3.b)</b>	Clearly show trees to be removed and trees to be saved.	No	No	Please leave tree labels for trees to be saved on Landscape Plans.
<b>Landscape tree credit (LDM3.b.(d))</b>	Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM	None		
<b>Plant Sizes for ROW, Woodland replacement and others (LDM 3.c)</b>	Refer to Chapter 37, LDM for more details	No	No	Include sizes on plant list.
<b>Plant size credit (LDM3.c.(2))</b>	NA			
<b>Prohibited plants (LDM 3.d)</b>	No plants on City Invasive Species List	No plant list included	TBD	
<b>Recommended trees for planting under overhead utilities (LDM 3.e)</b>	Label the distance from the overhead utilities			Please dimension distance from proposed trees close to overhead lines
<b>Collected or Transplanted trees (LDM 3.f)</b>		NA		

Item	Required	Proposed	Meets Code	Comments
<b>Nonliving Durable</b> <b>Material: Mulch (LDM 4)</b>	§ Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth § Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate. § Refer to section for additional information	Yes	Yes	

**NOTES:**

1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. For the landscape requirements, please see the Zoning Ordinance landscape section 5.5 and the Landscape Design Manual for the appropriate items under the applicable zoning classification.
3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.

**WETLAND REVIEW**

October 12, 2017  
ECT No. 170651-0100

Ms. Barbara McBeth, AICP  
City Planner  
Community Development Department  
City of Novi  
45175 W. Ten Mile Road  
Novi, Michigan 48375

Re: Oberlin West (JSP17-0049)  
Wetland Review of the PRO Concept Plan (PSP17-0148)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Conceptual PRO Plan for the proposed Oberlin West residential development project prepared by Atwell dated September 15, 2017 and stamped "Received" by the City of Novi Community Development Department on September 19, 2017 (Plan). The Plan was reviewed for conformance with the City of Novi Wetland and Watercourse Protection Ordinance and the natural features setback provisions in the Zoning Ordinance. ECT also visited the site on October 3, 2017 in order to verify wetland boundaries.

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The following wetland related items are required for this project:

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required (Non-Minor)
Wetland Mitigation	Required
Wetland Buffer Authorization	Required
MDEQ Permit	Likely required - It is the applicant's responsibility to contact the MDEQ in order to determine the need for a wetland use permit.
Wetland Conservation Easement	Required

The proposed development is located south of W. Eleven Mile Road east of Wixom Road in Section 22. The project is to be located west of the ITC electrical transmission corridor which is directly west of the existing Oberlin residential development. The project includes the development of twenty-three (23) single family homes, associated entrance drive, utilities, stormwater detention basin, and wetland

mitigation area (to be located both within the subject property boundaries and within the ITC Corridor).

Based on our review of the Plan, Novi aerial photos, Novi GIS, and the City of Novi Official Wetlands and Woodlands Maps (see Figure 1), it appears as if this proposed project site contains Regulated Wetlands as well as Regulated Woodlands. The majority of the subject site appears to have been previously disturbed (see Figure 2, 1963 aerial photo). The open water/emergent wetland area located in the central portion of the proposed development has been present in some fashion since at least 1940 (see Figure 3, 1940 aerial photo). It is ECT's opinion that this wetland area was not originally constructed solely for stormwater storage, but has historically been a wetland area. This wetland area is indicated as regulated on the City of Novi Official Wetland and Woodlands Map. The southern section of the site contains an area mapped as City of Novi Regulated Woodlands. The site contains an existing residence and several other existing buildings/structures.

The site was reviewed for the presence of regulated wetlands as defined in the City of Novi Wetland and Watercourse Protection Ordinance. ECT suggests that the City of Novi Engineering Department review this plan in order to verify that the site's stormwater will be adequately managed and meet the City's stormwater storage requirements.

#### **City of Novi Ordinance Requirements**

The City of Novi Wetland and Watercourse Protection Ordinance (City of Novi Code of Ordinances, Part II, Chapter 12, Article V.; Division 2.) describes the regulatory criteria for wetlands and review standards for wetland permit applications.

The wetland essentiality criteria as described in the Wetland and Watercourse Protection Ordinance are included below. Wetlands deemed essential by the City of Novi require the approval of a use permit for any proposed impacts to the wetland.

*All noncontiguous wetland areas of less than two (2) acres which appear on the wetlands inventory map, or which are otherwise identified during a field inspection by the city, shall be analyzed for the purpose of determining whether such areas are essential to the preservation of the natural resources of the city....In making the determination, the city shall find that one (1) or more of the following exist at the particular site:*

- (1) The site supports state or federal endangered or threatened plants, fish or wildlife appearing on a list specified in Section 36505 of the Natural Resources Environmental Protection Act (Act 451 of 1994) [previously section 6 of the endangered species act of 1974, Act No. 203 of the Public Acts of 1974, being section 229.226 of the Michigan Compiled Laws].*
- (2) The site represents what is identified as a locally rare or unique ecosystem.*
- (3) The site supports plants or animals of an identified local importance.*
- (4) The site provides groundwater recharge documented by a public agency.*
- (5) The site provides flood and storm control by the hydrologic absorption and storage capacity of the wetland.*



- (6) *The site provides wildlife habitat by providing breeding, nesting or feeding grounds or cover for forms of wildlife, waterfowl, including migratory waterfowl, and rare, threatened or endangered wildlife species.*
- (7) *The site provides protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.*
- (8) *The site provides pollution treatment by serving as a biological and chemical oxidation basin.*
- (9) *The site provides erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.*
- (10) *The site provides sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.*

*After determining that a wetland less than two (2) acres in size is essential to the preservation of the natural resources of the city, the wetland use permit application shall be reviewed according to the standards in subsection 12-174(a).*

It should be noted that in addition to wetlands, the City of Novi also regulates the 25-foot wetland setback (i.e., buffer). The surveyed wetland boundaries as well as the 25-foot wetland setbacks shall be indicated on subsequent site plans. The City of Novi's Zoning Ordinance (wetland/watercourse setback requirement) states:

*There shall be maintained in all districts a wetland and watercourse setback, as provided herein, unless and to the extent, it is determined to be in the public interest not to maintain such a setback. The intent of this provision is to require a minimum setback from wetlands and watercourses, and to regulate property within such setback in order:*

- a) *To prevent physical harm, impairment or destruction of or to such wetlands and watercourses. It has been determined that, in the absence of such a minimum setback, intrusions in or on to such areas would occur, resulting in harm, impairment or destruction of the same contrary to the public health, safety and general welfare.*
- b) *Protect unique wildlife habitat and habitat transition, including, without limitation, feeding, nesting, resting and traveling areas for numerous animals.*
- c) *Protection of surface water run-off and water quality for pollution preventing purposes, and assistance in beneficial water recharge for drinking, irrigation and other purposes.*
- d) *Provide water storage area in storm events.*
- e) *Provide areas for recreational or other functional uses which are unique due to geographic relationship to natural feature.*
- f) *Preserve aesthetic views and areas for the enjoyment of natural resources.*
- g) *Preserve threatened and endangered species habitat, including upland species.*
- h) *Reduce the need for on-site and off-site storm water storage capacity based upon the availability of a greater area of absorption and a smaller impervious area.*
- i) *Stabilize and protect soil resources, including the prevention of erosion and prohibition of the loss due to moving water resulting in destruction of upland, structures and infrastructure on the upland, and prevention of the alteration of the course of moving waters.*

**Onsite Wetland Evaluation**

ECT has reviewed the City of Novi Official Wetland and Woodlands Map and completed an onsite wetland verification on October 3, 2017. The focus of the inspection was to review site conditions in order to determine whether on-site wetlands are considered regulated under the City of Novi’s Wetland and Watercourse Protection Ordinance. As noted above, there is one (1) existing open water wetland with some emergent fringe located around the perimeter located in the central portion of the site. Several large black willow trees (*Salix nigra*) are located around the perimeter.

The applicant shall have the wetland boundary clearly flagged in the field, surveyed and clearly indicated and labeled on the Plan. The overall wetland area shall be provided on the Plan in addition to specifying the surveyed area of the open water area. Individual wetland flag numbers shall also be provided on the plan.

What follows is a summary of the wetland impacts associated with the proposed site design.

**Wetland Impact Review**

The Plan appears to note that the open water section of the wetland is 0.83 acres in size. It also notes that the wetland fringe area is 0.63 acres.

The site development proposes to fill the existing wetland in its entirety. The following table summarizes the proposed wetland impacts as listed on the *Layout Plan* (Sheet 03):

**Table 1. Wetland Impact/Mitigation Table (MDEQ)**

<b>Wetland</b>	<b>City Regulated?</b>	<b>MDEQ Regulated?</b>	<b>Wetland Area</b>	<b>Impact Area</b>	<b>Required Mitigation for City</b>	<b>Required Mitigation for MDEQ</b>
			<b>Acre</b>	<b>Acre</b>	<b>Acre</b>	<b>Acre</b>
A (Open Water)	<b>Yes, City Regulated /Essential</b>	<b>Not Likely</b>	0.83	0.83	0.83 (1:1 ratio)	None
A (Wetland Fringe)	<b>Yes, City Regulated /Essential</b>	<b>Likely</b>	0.63	0.63	0.95 (1.5:1 ratio)	0.95 (1.5:1 ratio)
<b>TOTAL</b>	--	--	<b>1.46</b>	<b>1.46</b>	<b>1.78</b>	<b>0.95</b>

Impacts to the 25-foot wetland setbacks are proposed. As with the wetland, the 25-foot wetland buffer area is proposed to be filled. The Plan does not appear to indicate the 25-foot wetland setbacks or quantify the area of existing 25-foot buffer. This information shall be provided on the Plan.

**Regulatory Status and Permits**

It can be noted that the Michigan Department of Environmental Quality (MDEQ) generally regulates wetlands that are within 500 feet of a waterbody, regulated stream or are part of wetland system greater than 5 acres in size. The It is the applicant’s responsibility to contact MDEQ in order to confirm

the regulatory authority with respect to the on-site wetland areas. The MDEQ does not regulate the 25-foot wetland buffer as does the City of Novi. This wetland appears to be regulated by the MDEQ as it appears to be within 500-feet of a drain that is generally located south of the subject site.

The purpose of the City of Novi Wetland and Watercourse Protection Ordinance is described in the City of Novi Code of Ordinances, Part II, Chapter 12, Article V.; Division 1. This section states that:

- (a) The wetlands and watercourses of the city are indispensable and fragile natural resources subject to floodwater capacity limitations, erosion, soil bearing capacity limitations and other hazards. In their natural state, wetlands and watercourses provide many public benefits, such as the maintenance of water quality through nutrient cycling and sediment trapping, and flood and stormwater runoff control through temporary water storage, slow release and groundwater recharge. In addition, wetlands provide open space, passive recreation, fish and wildlife habitat, including migratory waterfowl and rare, threatened or endangered animal and plant species. The continued destruction and loss of wetlands and watercourses constitutes a distinct and immediate danger to the public health, safety and general welfare.
- (b) Throughout the state, considerable acreage of these important natural resources has been lost or impaired by draining, dredging, filling, excavating, building, pollution and other acts inconsistent with the natural uses of such areas. Remaining wetlands and watercourses are in jeopardy of being despoiled or impaired. Consequently, it is the policy of the city to prevent a further net loss of those wetlands that are: (1) contiguous to a lake, pond, river or stream, as defined in Administrative Rule 281.921; (2) two (2) acres in size or greater; or (3) less than two (2) acres in size, but deemed essential to the preservation of the natural resources of the city under the criteria set forth in subsection 12-174(b).
- (c) Pursuant to Mich. Const. 1963, Art. IV, § 52, the conservation and development of natural resources of the state is a matter of paramount public concern in the interest of the health, safety and general welfare of the people. Pursuant to the Michigan Environmental Protection Act, MCL 324.1701, et seq., it is the responsibility of public and private entities to prevent the pollution, impairment or destruction of the air, water or other natural resources by their conduct. It is, therefore, the policy of the city to protect wetlands and watercourses while taking into account varying ecological, hydrologic, economic, recreational and aesthetic values. Activities which may damage wetlands and watercourses shall be located on upland sites outside of upland woodland areas, unless there are no less harmful, feasible and prudent alternatives to the proposed activity. When an activity will result in the impairment or destruction of a wetland, mitigation shall be required in accordance with section 12-173(e)1.b.
- (d) It is the purpose of this article to protect the public health, safety and welfare through the protection of wetlands and watercourses. To meet these purposes, this article establishes standards and procedures for the review of proposed activities in wetlands and watercourses, provides for the issuance of use permits for approved activities, requires coordination with other applicable ordinances, statutes and regulations and establishes penalties for the violation of this article.

Any proposed impacts to the on-site wetlands would require a City of Novi *Wetland (Non-Minor) Use Permit* as well as an *Authorization to Encroach the 25-Foot Natural Features Setback* for any proposed impacts to the 25-foot wetland buffers. The on-site wetlands are considered essential by the City as they appear to meet one or more of the essentiality criteria set forth in the City's Wetland and Watercourse Protection Ordinance (i.e., storm water storage/flood control, wildlife habitat, etc.).

The granting or denying of nonresidential minor use permits shall be the responsibility of the Community Development Department per the City's Wetland Ordinance. A nonresidential minor use permit is a permit for activities consisting of no more than one (1) of the following activities which have a minimal environmental effect:

- a) Minor fills of three hundred (300) cubic yards or less and not exceeding ten thousand (10,000) square feet in a wetland area, providing the fill consists of clean, nonpolluting materials which will not cause siltation and do not contain soluble chemicals or organic matter which is biodegradable, and providing that any upland on the property is utilized to the greatest degree possible. All fills shall be stabilized with sod, or seeded, fertilized and mulched, or planted with other native vegetation, or riprapped as necessary to prevent soil erosion.
- b) Installation of a single water outfall provided that the outlet is riprapped or otherwise stabilized to prevent soil erosion.
- c) Watercourse crossings by utilities, pipelines, cables and sewer lines which meet all of the following design criteria:
  - i. The method of construction proposed is the least disturbing to the environment employable at the given site;
  - ii. The diameter of pipe, cable or encasement does not exceed twenty (20) inches;
  - iii. A minimum of thirty (30) inches of cover will be maintained between the top of the cable or pipe and the bed of the stream or other watercourse on buried crossings; and
  - iv. Any necessary backfilling will be of washed gravel.
- d) Extension of a wetland/watercourse permit previously approved by the planning commission.
- e) Replacement of a culvert of an identical length and size, and at the same elevation. If the proposed culvert is of a greater length or size than the existing culvert, or is a new culvert altogether, it must meet the conditions of subpart c., above, to qualify for a nonresidential minor use permit.
- f) Temporary impacts where the encroachment into protected areas is less than five hundred (500) feet.

**Wetland Mitigation, Regulatory Status and Permits**

Wetland mitigation has been proposed on the Plan. The City's threshold for wetland mitigation is 0.25-acre of wetland impact and the MDEQ's threshold is 0.30-acre.

A total of 0.95 acres is proposed along the east side of the site extending off-site into the ITC utility corridor located directly adjacent to the site. This mitigation area appears to be calculated as 1.5:1 replacement for the proposed impacts to the wetland fringe area (0.63 acre).

The City's Wetland Ordinance (Section 12-176. Mitigation) states that the city has embraced the policy of no net loss to valuable wetlands. The mitigation proposed must have a mitigation plan that is sufficient to compensate for the original wetland losses. The city shall provide a consistent approach to reviewing and implementing this no net loss policy. For the purposes of determining a wetland replacement ratio, technical information shall be submitted regarding the following criteria when submitting a mitigation plan:

- Size of habitat type impacted;
- Current predominant vegetation (e.g., submerged, floating, persistent, emergent, scrub/shrub or forested wetland etc.);
- Assessment of the overall functional quality of the wetland; and
- Soil analysis.

The wetland replacement ratio shall be determined on a case-by-case basis taking into account the totality of the facts and information available. The ratio shall be no less than 1:1 and no greater than 2:1.

When wetland mitigation is required, open water areas are generally mitigated at a ratio of 1:1 within the City. Emergent wetlands are mitigated at a ratio of 1.5:1. Forested wetland areas are generally mitigated at a ratio of 2:1. Therefore, subsequent site plans should provide for mitigation of the open water impacts as well as the impacts to the emergent wetland fringe.

As indicated in Table 1, above, it appears as if the proposed wetland impacts require a total of 1.78 acres of wetland mitigation; 0.83 acre of open water habitat replacement and 0.95 acre of emergent wetland replacement. The applicant should review and revise the Plan as necessary.

Finally, it should be noted that a significant portion of the proposed wetland mitigation area will be located off-site to the east; within an ITC utility corridor. The applicant shall provide documentation that indicates that this location for wetland mitigation construction will be authorized by ITC.

**Wetland Comments**

Please consider the following comments when preparing subsequent site plan submittals:

1. ECT encourages the Applicant to minimize impacts to on-site wetlands and wetland setbacks to the greatest extent practicable. The Applicant should consider modification of the proposed site design to preserve wetland and wetland buffer areas as potential site amenities.
2. The applicant shall have the wetland boundary clearly flagged in the field, surveyed and clearly indicated and labeled on the Plan. Individual wetland flag numbers shall also be provided on the Plan.
3. The overall wetland area (i.e., square feet or acres) shall be provided on the Plan in addition to specifying the surveyed area of the open water area.
4. The Plan does not appear to indicate the 25-foot wetland setbacks or quantify the area of existing 25-foot buffer. This information shall be provided on the Plan. Proposed impacts to the 25-foot buffer shall be quantified on the Plan.
5. The proposed impacts to the on-site wetlands would require a *City of Novi Non-Minor Wetland Use Permit* as well as an *Authorization to Encroach the 25-Foot Natural Features Setback* for the proposed impacts to the 25-foot wetland buffers. The on-site wetlands are considered essential by the City as they appear to meet one or more of the essentiality criteria set forth in the City's Wetland and Watercourse Protection Ordinance (i.e., storm water storage/flood control, wildlife habitat, etc.).
6. It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from the MDEQ for any proposed wetland impact. Final determination as to the regulatory status of each of the on-site wetlands shall be made by MDEQ. The Applicant should provide a copy of the MDEQ Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information.
7. When wetland mitigation is required, open water areas are generally mitigated at a ratio of 1:1 within the City. Emergent wetlands are mitigated at a ratio of 1.5:1. Forested wetland areas are generally mitigated at a ratio of 2:1. Therefore, subsequent site plans should provide for mitigation of the open water impacts as well as the impacts to the emergent wetland fringe.

As indicated in Table 1, above, it appears as if the proposed wetland impacts require a total of 1.78 acres of wetland mitigation; 0.83 acre of open water habitat replacement and 0.95 acre of emergent wetland replacement. The applicant should review and revise the Plan as necessary.

8. A significant portion of the proposed wetland mitigation area will be located off-site to the east; within an ITC utility corridor. The applicant shall provide documentation that indicates that this location for wetland mitigation construction will be authorized by ITC.

9. ECT suggests that the City of Novi Engineering Department review this plan in order to verify that the site's stormwater will be adequately managed and meet the City's stormwater storage requirements.

**Recommendation**

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If you have any questions regarding the contents of this letter, please contact us.

Sincerely,

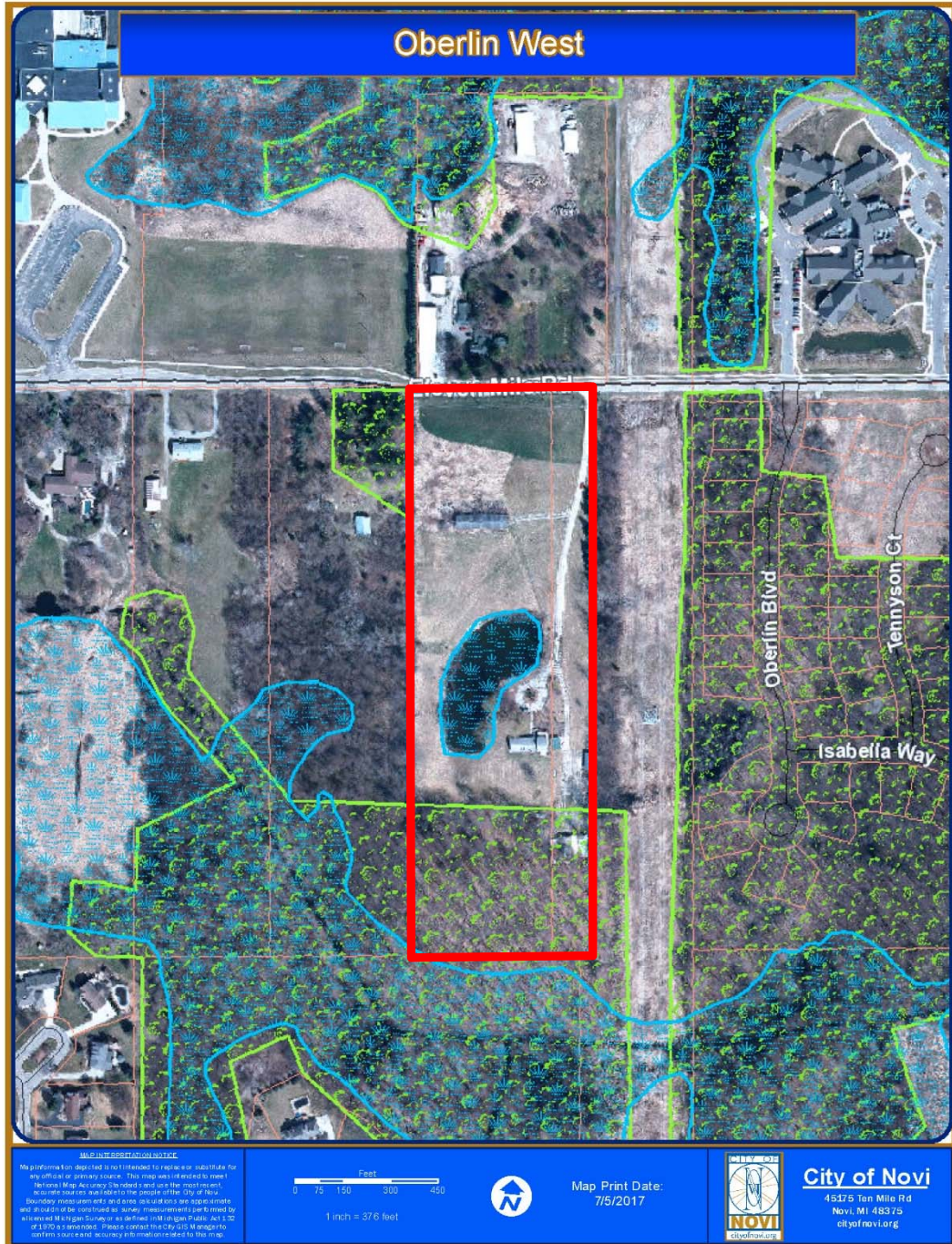
**ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**



Peter Hill, P.E.  
Senior Associate Engineer

cc: Sri Komaragiri, City of Novi Planner  
Rick Meader, City of Novi Landscape Architect  
Hannah Smith, City of Novi Planning Assistant

Attachments: Figure 1. City of Novi Regulated Wetland & Woodland Map  
Figure 2. Site Aerial Photo – 1963  
Figure 3. Site Aerial Photo – 1940  
Site Photos



**Figure 1.** City of Novi Regulated Wetland & Woodland GIS Coverage Map (approximate project boundary shown in red). Regulated Woodland areas are shown in green and regulated Wetland areas are shown in blue.



1963

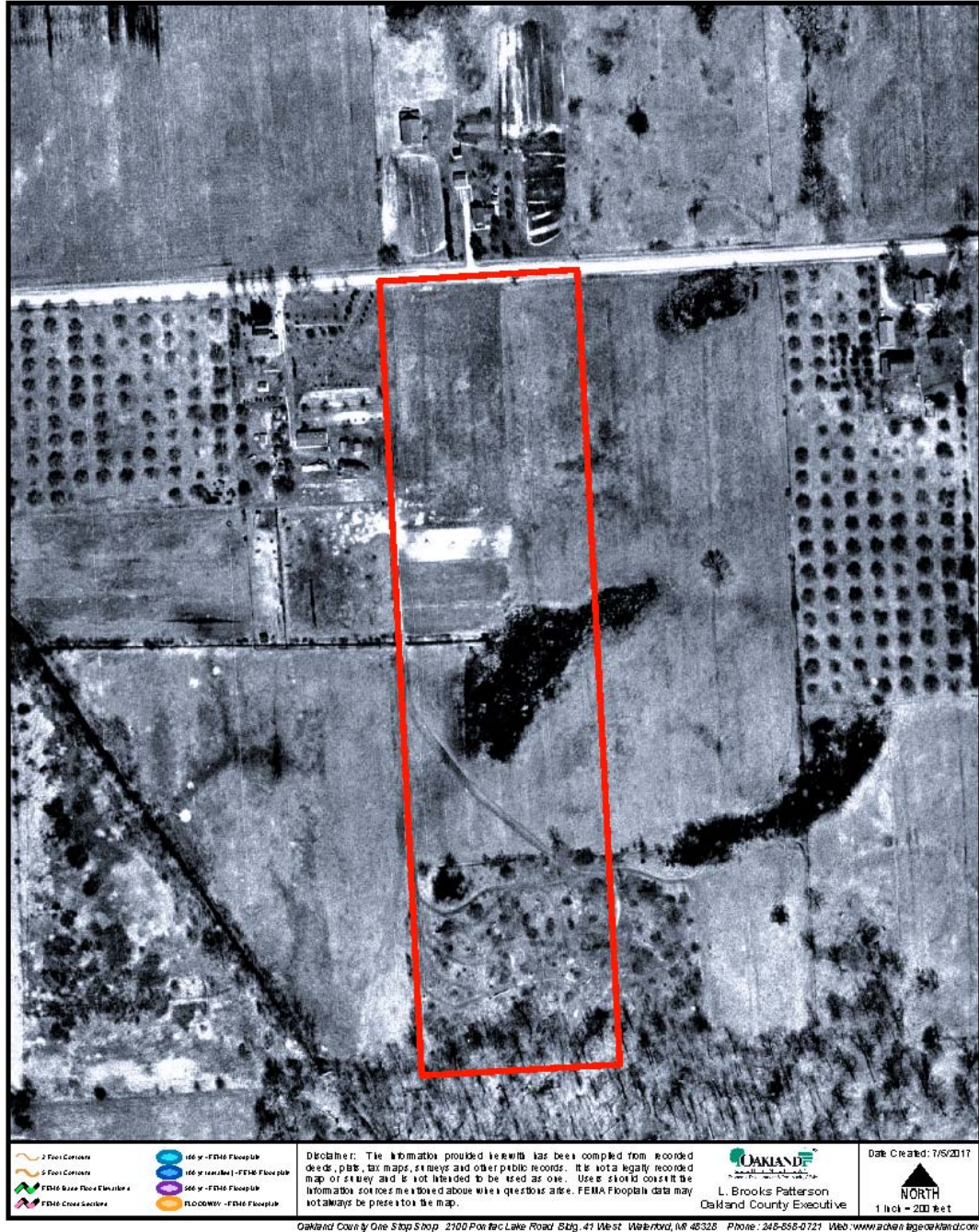


Figure 2. Site Aerial Photo – 1963 (Source: <https://gis.oakgov.com/PropertyGateway/Home.mvc>)

1940

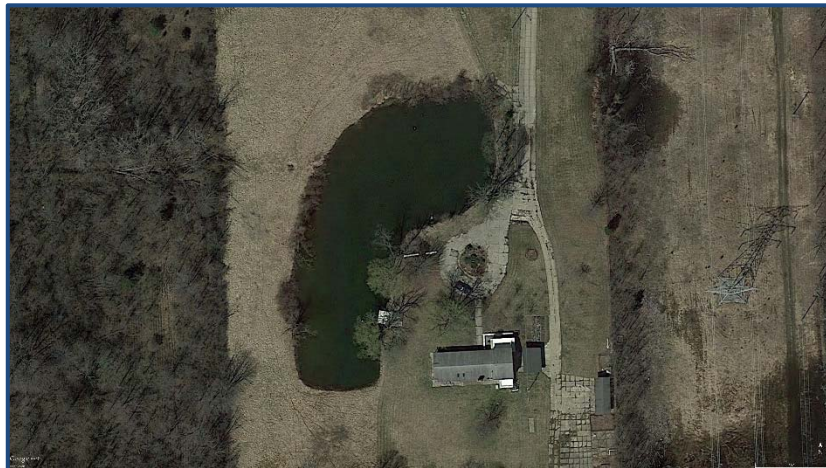


Figure 3. Site Aerial Photo – 1940 (Source: <https://gis.oakgov.com/PropertyGateway/Home.mvc>)

*Site Photos*



**Photo 1.** Looking south at existing emergent and open water wetland (ECT, October 3, 2017).



**Photo 2.** Existing emergent and open water wetland (Source: Google Earth, Imagery dated April 7, 2017 and accessed October 12, 2017).

**WOODLAND REVIEW**



October 12, 2017  
ECT No. 170651-0200

Ms. Barbara McBeth, AICP  
City Planner  
Community Development Department  
City of Novi  
45175 West Ten Mile Road  
Novi, MI 48375

Re: Oberlin West (JSP17-0049)  
Woodland Review of the PRO Concept Plan (PSP17-0148)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Conceptual PRO Plan for the proposed Oberlin West residential development project prepared by Atwell dated September 15, 2017 and stamped "Received" by the City of Novi Community Development Department on September 19, 2017 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37. ECT conducted a woodland evaluation for the property on October 3, 2017.

**LEFT BLANK ON PURPOSE**

The following woodland related items are required for this project:

Item	Required/Not Required/Not Applicable
Woodland Permit	Required
Woodland Fence	Required
Woodland Conservation Easement	Required

The proposed development is located south of W. Eleven Mile Road east of Wixom Road in Section 22. The project is to be located west of the ITC electrical transmission corridor which is directly west of the existing Oberlin residential development. The project includes the development of twenty-three (23) single family homes, associated entrance drive, utilities, stormwater detention basin, and wetland mitigation area (to be located both within the subject property boundaries and within the ITC Corridor).

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Blvd., Suite 300  
Ann Arbor, MI  
48105

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769-3004

FAX (734)  
769-3164

Based on our review of the Plan, Novi aerial photos, Novi GIS, and the City of Novi Official Wetlands and Woodlands Maps (see Figure 1), it appears as if this proposed project site contains Regulated Wetlands as well as Regulated Woodlands. The majority of the subject site appears to have been previously disturbed (see Figure 2, 1963 aerial photo). The southern section of the site contains an area mapped as City of Novi Regulated Woodlands. The site contains an existing residence and several other existing buildings/structures. A tree survey and inventory has not been submitted for the site.

The purpose of the Woodlands Protection Ordinance is to:

- 1) *Provide for the protection, preservation, replacement, proper maintenance and use of trees and woodlands located in the city in order to minimize disturbance to them and to prevent damage from erosion and siltation, a loss of wildlife and vegetation, and/or from the destruction of the natural habitat. In this regard, it is the intent of this chapter to protect the integrity of woodland areas as a whole, in recognition that woodlands serve as part of an ecosystem, and to place priority on the preservation of woodlands, trees, similar woody vegetation, and related natural resources over development when there are no location alternatives;*
- 2) *Protect the woodlands, including trees and other forms of vegetation, of the city for their economic support of local property values when allowed to remain uncleared and/or unharvested and for their natural beauty, wilderness character of geological, ecological, or historical significance; and*
- 3) *Provide for the paramount public concern for these natural resources in the interest of health, safety and general welfare of the residents of the city.*

What follows is a summary of our findings regarding on-site woodlands associated with the proposed project.

#### **On-Site Woodland Evaluation**

The majority of the City Regulated Woodland area is located on the southern (1/4) portion of the project site (see Figure 1). The *Existing Conditions and Demo Plan* (Sheet 02) notes that the existing on-site trees are predominantly sugar maple (*Acer saccharum*) and black cherry (*Prunus serotina*) with scattered American beech (*Fagus grandifloras*), basswood (*Tulia americana*), and bitternut hickory (*Cary cordiformis*). A tree row is present along the eastern boundary of the subject site. This tree row consists of silver maple (*Acer saccharin*), mulberry (*Mores spp.*), black cherry, and box elder (*Acer negundo*).

The Plan does not contain existing tree survey information, proposed tree removals or a proposed Woodland Replacement Plan. The applicant is encouraged to preserve as many of the existing

trees found on the subject property as possible. ECT recommends that we conduct a wetland and woodland field evaluation at the time of Preliminary Site Plan submittal in order to verify the existing on-site woodland information (tree sizes, species, conditions, etc.) when this information is provided.

In terms of habitat quality and diversity of tree species, the woodland areas located on the site are of fair to good quality. These wooded areas provide a good level of environmental benefit and function in terms of a scenic asset, windblock, noise buffer and habitat for local wildlife.

### **Proposed Woodland Impacts and Replacements**

The Plan does not include a tree survey, list of existing trees, or list of proposed trees to be removed. As noted above, this information shall be provided in subsequent site plan submittals.

The impacts to the area designated as City Regulated Woodland that is located in the southern section of the site appear to be relatively limited (i.e., only a few of the proposed Lots appear to encroach into this woodland area; Lots 12, 13, and 14). It should be noted that the City of Novi replacement requirements pertain to regulated trees with diameter-at-breast height (DBH) greater than or equal to 8 inches that are located within areas designated as regulated on the City of Novi Regulated Woodland Map or any tree 36 inches DBH or greater.

The Plan does not currently appear to provide the quantity, species, or sizes of any proposed Woodland Replacement material. Subsequent site Plans should include this information. The Plan should clearly indicate the locations, sizes, species and quantities of any woodland replacement trees to be planted. The applicant should review and revise the Plan in order to better indicate how the on-site Woodland Replacement requirements will be met. It is recommended that the applicant provide a table that specifically describes the species and quantities of proposed Woodland Replacement trees. It should also be noted that all deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1-to-1 replacement ratio. All coniferous replacement trees shall be 6-feet in height (minimum) and provide 1.5 trees-to-1 replacement credit (1.5:1) replacement ratio (i.e., each coniferous tree planted provides for 0.67 credits). The “upsizing” of Woodland Replacement trees for additional Woodland Replacement credit is not supported by the City of Novi. Finally, all proposed Woodland Replacement tree material shall meet the species requirements in the *Woodland Tree Replacement Chart* (attached).

With regard to the location of woodland replacement trees, the Woodland Ordinance states:

- *The location of replacement trees shall be subject to the approval of the planning commission and shall be such as to provide the optimum enhancement, preservation and protection of woodland areas. Where woodland densities permit, tree relocation or replacement shall be within the same woodland areas as the removed trees. Such*

*woodland replanting shall not be used for the landscaping requirements of the subdivision ordinance or the zoning landscaping;*

- *Where the tree relocation or replacement is not feasible within the woodland area, the relocation or replacement plantings may be placed elsewhere on the project property;*
- *Where tree relocation or replacement is not feasible within the woodland area, or on the project property, the permit grantee shall pay into the city tree fund monies for tree replacement in a per tree amount representing the market value for the tree replacement as approved by the planning commission. The city tree fund shall be utilized for the purpose of woodland creation and enhancement, installation of aesthetic landscape vegetation, provision of care and maintenance for public trees and provision and maintenance of specialized tree care equipment. Tree fund plantings shall take place on public property or within right-of-ways with approval of the agency of jurisdiction. Relocation or replacement plantings may be considered on private property provided that the owner grants a permanent conservation easement and the location is approved by the planning commission;*
- *Where replacements are installed in a currently non-regulated woodland area on the project property, appropriate provision shall be made to guarantee that the replacement trees shall be preserved as planted, such as through a conservation or landscape easement to be granted to the city. Such easement or other provision shall be in a form acceptable to the city attorney and provide for the perpetual preservation of the replacement trees and related vegetation.*

The applicant shall demonstrate that all proposed Woodland Replacement Trees and Regulated Woodland areas to remain will be guaranteed to be preserved as planted within a conservation easement or landscape easement to be granted to the City.

**City of Novi Woodland Review Standards and Woodland Permit Requirements**

Based on Section 37-29 (*Application Review Standards*) of the City of Novi Woodland Ordinance, the following standards shall govern the grant or denial of an application for a use permit required by this article:

*No application shall be denied solely on the basis that some trees are growing on the property under consideration. However, the protection and conservation of irreplaceable natural resources from pollution, impairment, or destruction is of paramount concern. Therefore, the preservation of woodlands, trees, similar woody vegetation, and related natural resources shall have priority over development when there are location alternatives.*



In addition,

*“The removal or relocation of trees shall be limited to those instances when necessary for the location of a structure or site improvements and when no feasible and prudent alternative location for the structure or improvements can be had without causing undue hardship”.*

**Woodland Comments**

ECT recommends that the Applicant address the items noted below in subsequent site plan submittals:

1. ECT encourages the Applicant to minimize impacts to on-site Woodlands to the greatest extent practicable. The applicant should consider modifying the quantity of lots or lot shapes in order to avoid impacts to areas designated as City Regulated woodlands as well as the existing tree row located along the east side of the site.
2. A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch diameter-at-breast-height (DBH) or greater and located within an area designated as City Regulated Woodland, or any tree 36-inches DBH regardless of location on the site. Such trees shall be relocated or replaced by the permit grantee. All deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and all coniferous replacement trees shall be six (6) feet in height (minimum). All Woodland Replacement trees shall be species that are listed on the City’s Woodland Tree Replacement Chart (attached).
3. The Plan should clearly indicate the locations, sizes, species and quantities of all woodland replacement trees to be planted. It is recommended that the applicant provide a table that specifically describes the species and quantities of proposed Woodland Replacement trees. It should also be noted that all deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1-to-1 replacement ratio. All coniferous replacement trees shall be 6-feet in height (minimum) and provide 1.5 trees-to-1 replacement credit replacement ratio (i.e., each coniferous tree planted provides for 0.67 credits). The “upsizing” of Woodland Replacement trees for additional Woodland Replacement credit is not supported by the City of Novi.
4. The applicant should clearly indicate on the Plan if existing trees are proposed for removal. The Applicant shall report the number of trees that are proposed to be removed within the following categories and indicate how many Woodland Replacement are required for each removed tree:

**Replacement Tree Requirements**

Removed Tree D.B.H. (In Inches)	Ratio Replacement/ Removed Tree
8 < 11	1
>11 < 20	2
> 20 < 29	3
> 30	4

5. It should be noted that when a proposed tree to be removed has multiple trunks, each multi-stemmed tree's caliper inch diameter shall be totaled and then divided by 8 to determine the required number of Woodland Replacement trees. The result shall be rounded up to determine the number of replacement credits required. For example, a multi-stemmed tree with 10", 12" and 13" trunks ( $10+12+13=34$  divided by  $8 = 4.25$ ). Therefore, rounding to the next full number, five (5) replacement credits would be required.
6. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of remaining woodland and woodland replacement trees. The applicant shall demonstrate that the all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit. These easement areas shall be indicated on the Plan.
7. A Woodland Replacement financial guarantee for the planting of replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of \$400.
8. Based on a successful inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement financial guarantee will be returned to the Applicant. A Woodland Maintenance financial guarantee in the amount of twenty-five percent (25%) of the original Woodland Replacement financial guarantee shall then be provided by the applicant. This Woodland Maintenance financial guarantee will be kept for a period of 2-years after the successful inspection of the on-site woodland replacement tree installation.

9. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement tree credits that cannot be placed on-site.
10. Replacement material should not be located 1) within 10' of built structures or the edges of utility easements and 2) over underground structures/utilities or within their associated easements. In addition, replacement tree spacing should follow the *Plant Material Spacing Relationship Chart for Landscape Purposes* found in the City of Novi Landscape Design Manual.
11. ECT recommends that we conduct a woodland field verification at the time of Preliminary Site Plan submittal in order to verify existing regulated tree locations, species, sizes and conditions.

**Recommendation**

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If you have any questions regarding the contents of this letter, please contact us.

Respectfully submitted,

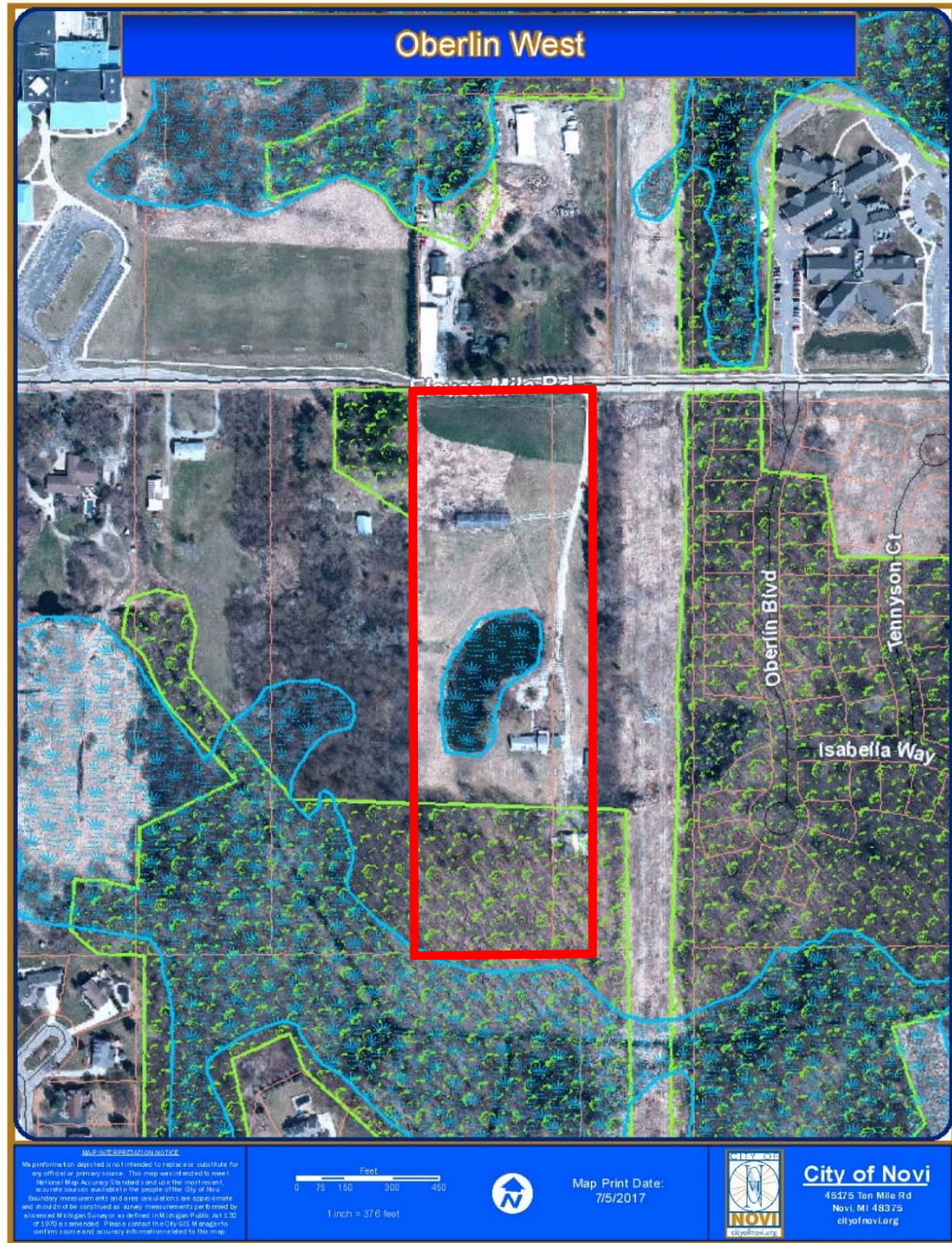
**ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**



Pete Hill, P.E.  
Senior Associate Engineer

cc: Sri Komaragiri, City of Novi Planner  
Rick Meader, City of Novi Landscape Architect  
Hannah Smith, City of Novi Planning Assistant

Attachments: Figure 1 – City of Novi Regulated Wetland and Woodland Map  
Figure 2 – Site Aerial Photo - 1963  
Woodland Replacement Tree Chart



**Figure 1.** City of Novi Regulated Wetland & Woodland GIS Coverage Map (approximate project boundary shown in red). Regulated Woodland areas are shown in green and regulated Wetland areas are shown in blue.

1963

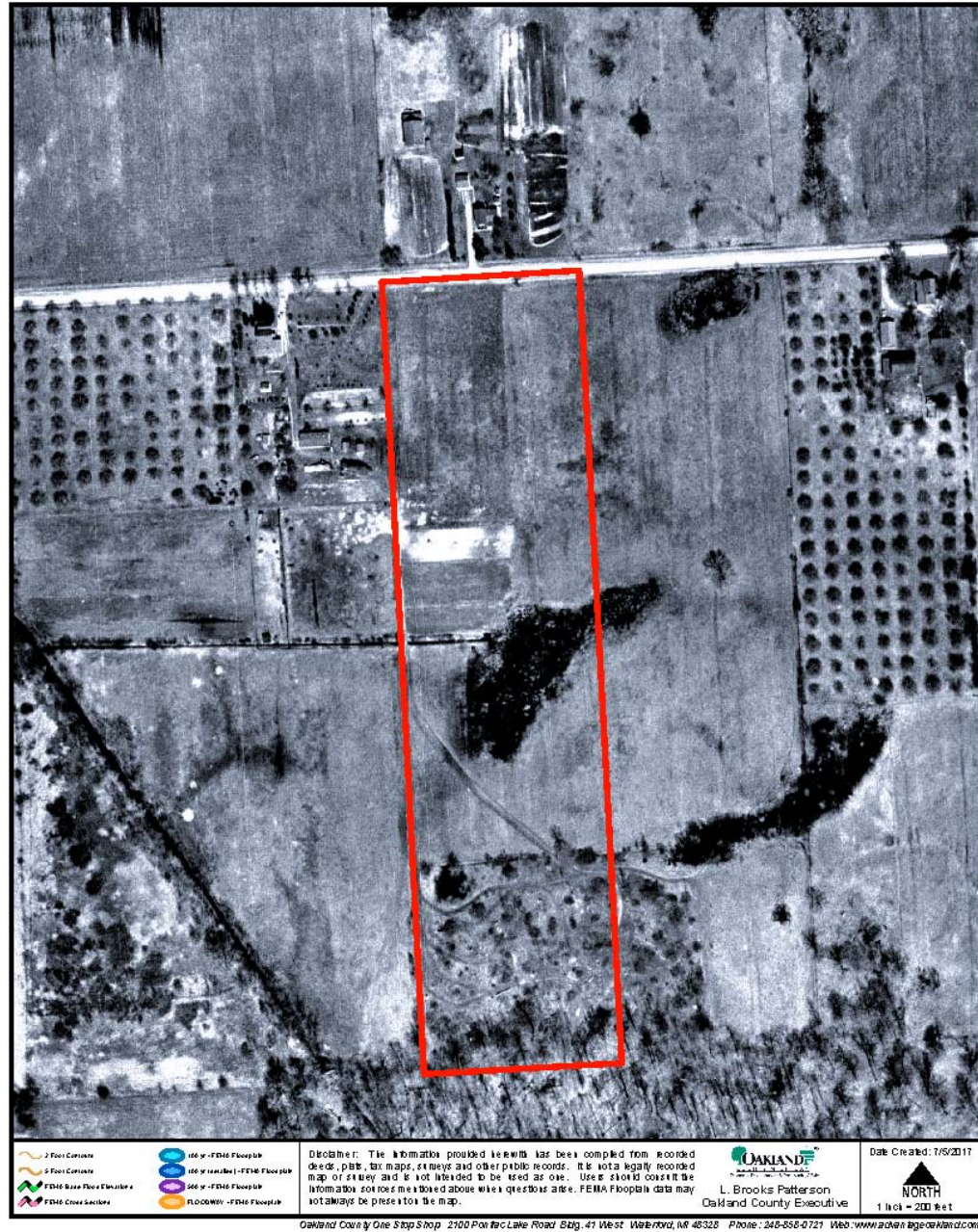


Figure 2. Site Aerial Photo – 1963 (Source: <https://gis.oakgov.com/PropertyGateway/Home.mvc>)

### Woodland Tree Replacement Chart

(from Chapter 37 Woodlands Protection)

(All canopy trees to be 2.5" cal or larger, evergreens as listed)

Common Name	Botanical Name
Black Maple	<i>Acer nigrum</i>
Striped Maple	<i>Acer pennsylvanicum</i>
Red Maple	<i>Acer rubrum</i>
Sugar Maple	<i>Acer saccharum</i>
Mountain Maple	<i>Acer spicatum</i>
Ohio Buckeye	<i>Aesculus glabra</i>
Downy Serviceberry	<i>Amelanchier arborea</i>
Yellow Birch	<i>Betula alleghaniensis</i>
Paper Birch	<i>Betula papyrifera</i>
American Hornbeam	<i>Carpinus caroliniana</i>
Bitternut Hickory	<i>Carya cordiformis</i>
Pignut Hickory	<i>Carya glabra</i>
Shagbark Hickory	<i>Carya ovata</i>
Northern Hackberry	<i>Celtis occidentalis</i>
Eastern Redbud	<i>Cercis canadensis</i>
Yellowwood	<i>Cladrastis lutea</i>
Beech	<i>Fagus sp.</i>
Thornless Honeylocust	<i>Gleditsia triacanthos inermis</i>
Kentucky Coffeetree	<i>Gymnocladus dioica</i>
Walnut	<i>Juglans sp.</i>
Eastern Larch	<i>Larix laricina</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Tuliptree	<i>Liriodendron tulipifera</i>
Tupelo	<i>Nyssa sylvatica</i>
American Hophornbeam	<i>Ostrya virginiana</i>
White Spruce_(1.5:1 ratio) (6' ht.)	<i>Picea glauca</i>
Black Spruce_(1.5:1 ratio) (6' ht.)	<i>Picea mariana</i>
Red Pine	<i>Pinus resinosa</i>
White Pine_(1.5:1 ratio) (6' ht.)	<i>Pinus strobus</i>
American Sycamore	<i>Platanus occidentalis</i>
Black Cherry	<i>Prunus serotina</i>
White Oak	<i>Quercus alba</i>
Swamp White Oak	<i>Quercus bicolor</i>
Scarlet Oak	<i>Quercus coccinea</i>
Shingle Oak	<i>Quercus imbricaria</i>
Burr Oak	<i>Quercus macrocarpa</i>
Chinkapin Oak	<i>Quercus muehlenbergii</i>
Red Oak	<i>Quercus rubra</i>
Black Oak	<i>Quercus velutina</i>
American Bladdernut	<i>Staphylea trifolia</i>
Bald Cypress	<i>Taxodium distichum</i>
American Basswood	<i>Tilia americana</i>
Hemlock (1.5:1 ratio) (6' ht.)	<i>Tsuga canadensis</i>

**TRAFFIC REVIEW**



AECOM  
 27777 Franklin Road  
 Southfield  
 MI, 48034  
 USA  
 aecom.com

**Project name:**  
 JSP17-0049 Oberlin West Concept PRO Traffic Review

**From:**  
 AECOM

**Date:**  
 October 12, 2017

**To:**  
 Barbara McBeth, AICP  
 City of Novi  
 45175 10 Mile Road  
 Novi, Michigan 48375

**CC:**  
 Sri Komaragiri, George Melistas, Theresa Bridges,  
 Darcy Rechten, Hannah Smith

# Memo

**Subject:** Oberlin West Concept PRO Traffic Review

## LEFT BLANK ON PURPOSE

## GENERAL COMMENTS

1. The applicant, Pulte Homes of Michigan, LLC, is proposing a 23-unit residential development on the south side of 11 Mile Road between Wixom Road and Beck Road.
2. 11 Mile Road is under the jurisdiction of the City of Novi.
3. The land is currently zoned RA; however, the applicant is proposing a PRO to rezone to R-4 residential zoning.
4. The development consists of one street resulting in a cul-de-sac.
5. The applicant has not requested any variances at this time.

## TRAFFIC IMPACTS

1. AECOM performed an initial trip generation estimate based on the ITE Trip Generation Manual, 9<sup>th</sup> Edition, as follows:

ITE Code: 210 (Single Family Detached Housing)  
 Development-specific Quantity: 23 Units  
 Zoning Change: RA to R-4

Trip Generation Summary				
	City of Novi Threshold	Maximum RA Estimated Trips (10 Units)	Maximum R-4 Estimated Trips (42 Units)	Proposed Development Estimated Trips (23 Units)
<b>AM Peak-Hour, Peak-Direction Trips</b>	100	13	30	20



<b>PM Peak-Hour, Peak-Direction Trips</b>	100	18	31	9
<b>Daily (One-Directional) Trips</b>	750	127	473	272

- The number of trips does not exceed the City's threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour. AECOM recommends performing the following traffic impact study in accordance with the City's requirements:

<b>Traffic Impact Study Recommendation</b>	
<b>Type of Study</b>	<b>Justification</b>
<b>Rezoning Traffic Impact Study</b>	The applicant is proposing to re-zone the parcel from RA to R-4.

## EXTERNAL SITE ACCESS AND OPERATIONS

*The following comments relate to the external interface between the proposed development and the surrounding roadway(s).*

- The applicant has proposed a divided driveway at the entrance to the site.
  - The proposed entrance and exiting lane widths are not in compliance with City standards and should be updated according to the standard provided in Figure IX.3 of the City's Code of Ordinances.
  - The applicant has proposed a 16 foot wide median island for the divided driveway. City standards indicate a standard of 10 feet for the width of the median island; however, 16 feet is within the allowable range. The applicant can either update the median island to 10 feet in width or seek an administrative variance for the 16 foot width. See Figure IX.3 in the City's Code of Ordinances for more information.
  - The applicant should provide additional dimensions for the driveway including turning radii, island length, and island offset. Reference Figure IX.3 in the City's Code of Ordinances for the City's standard dimensions for a divided driveway.
  - The applicant should provide a dimension for the proposed turnaround width and turning radii in the median.
- The applicant should provide dimensions and details for residential driveways. Reference Sec. 11-216.e and Figure IX.5 in the City's Code of Ordinances for standards and requirements. The applicant should also consider reducing the length of the divided driveway median so that the residential driveways of lots 1, 2, 3, 21, 22, and 23 are accessible from both directions (i.e. how would a vehicle from lot 5 access lot 23 if needed)
- The applicant should provide dimensions for the proposed right turn entering and exiting lanes and tapers. The City's standards for turn lanes and tapers are indicated in Figure IX.11 in the City's Code of Ordinances. It should be noted that based on the entering volumes and the average annual daily traffic (AADT) of 11 Mile Road, turn lanes and tapers are not required at the development.
- The applicant is required to provide the amount of available sight distance at the proposed driveway in accordance with Figure XIII-E in the City's Code of Ordinances.
- The applicant should indicate the amount of spacing in each direction to the next nearest driveway either on the same side or opposite side of 11 Mile Road. Reference Sec. 11-216.d.1.d and Figure IX.12 in the City's Code of Ordinances for more information.
  - The applicant should indicate the location of the proposed emergency access drive and pathway in comparison to the existing path on the north side of 11 Mile Road. Signing and striping for the crossing should be considered.

6. The applicant has proposed an emergency access pathway that is being placed in the ITC easement. The emergency access pathway is being coordinated with another City Parks and Recreation pathway. The emergency access pathway will match the current 10 foot wide asphalt connector pathway and also incorporate grass pavers and pathway markers on both sides of the asphalt in order to meet the required 20' wide emergency access requirement.
  - a. The applicant should provide the location and details of any proposed emergency access gate. Reference Figure VIII-K (page 2) in the City's Code of Ordinances for more information.

## INTERNAL SITE OPERATIONS

*The following comments relate to the on-site design and traffic flow operations.*

1. General Traffic Flow
  - a. The applicant should indicate dimensions for the proposed cul-de-sac. The applicant has proposed a cul-de-sac for a street length of over 1,000 feet. Under R-4 zoning, city standards only allow for cul-de-sacs on streets that are 800 feet or less. The applicant is required to seek a City Council variance for the deviation. City standards are referenced in Figure VIII-F and section 11.194.a.7 in the City's Code of Ordinances.
  - b. The proposed roadway width is in compliance with City standards.
2. Parking Facilities
  - a. The applicant is required to provide two parking spaces per each dwelling unit, totaling 56 parking spaces. The applicant should indicate the location of the proposed parking areas per each unit whether it be in a garage, driveway, or on-street parking.
  - b. Bicycle parking is not required at this development.
3. Sidewalk Requirements
  - a. The applicant has proposed five foot wide sidewalk on each side of the proposed street.
  - b. Since the proposed local street is a public roadway, the outside edge of the proposed sidewalk is required to be located one foot inside the future right-of-way line. The applicant should update the boulevard cross-sectional detail to coincide with the dimensions indicated in the site plan.
  - c. The applicant should provide locations and details of any proposed sidewalk ramps.
4. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices. The following is a discussion of the proposed signing and pavement markings.
  - a. The applicant should include details related to signing and striping in future plan sets.
    - i. The applicant is required to provide signing restricting parking in the proposed cul-de-sac.

Should the City or applicant have questions regarding this review, they should contact AECOM for further clarification.

Sincerely,

**AECOM**



Sterling Frazier, E.I.T.  
Reviewer, Traffic/ITS Engineer



Maureen N. Peters, PE  
Senior Traffic/ITS Engineer

**FIRE REVIEW**



September 27, 2017

TO: Barbara McBeth- City Planner  
Sri Ravali Komaragiri- Plan Review Center  
Hannah Smith- Plan Review Center

**CITY COUNCIL**

**Mayor**  
Bob Gatt

**Mayor Pro Tem**  
Dave Staudt

Gwen Markham

Andrew Mutch

Wayne Wrobel

Laura Marie Casey

Brian Burke

**City Manager**  
Pete Auger

**Director of Public Safety  
Chief of Police**  
David E. Molloy

**Director of EMS/Fire Operations**  
Jeffery R. Johnson

**Assistant Chief of Police**  
Erick W. Zinser

**Assistant Chief of Police**  
Jerrod S. Hart

RE: Oberlin West

PSP# 17-0148

**Project Description:**

Build a 23 single family dwelling subdivision on a cul-de-sac.

**Comments:**

1. Will the secondary access have a gate? If so MUST provide gate specifications on plans.
2. MUST provide water calculations for the fire hydrants for the project. (Due to the dead end water-main is greater than 800').

**Recommendation:**

**LEFT BLANK ON PURPOSE**

Sincerely,

Kevin S. Pierce-Fire Marshal  
City of Novi – Fire Dept.

cc: file

Novi Public Safety Administration  
45125 W. Ten Mile Road  
Novi, Michigan 48375  
248.348.7100  
248.347.0590 fax

cityofnovi.org

APPLICANT RESPONSE LETTER



November 6, 2017

Ms. Sri Komaragiri  
**City of Novi – Planning Department**  
45175 West Ten Mile Road  
Novi, Michigan 48375

Re: Pulte Homes, Oberlin West  
Planned Rezoning Overlay (PRO) Conceptual Submittal Package

Dear Ms. Komaragiri,

As you know, a pre-application meeting was held for the above referenced project with City staff on July 10 and a follow-up meeting with City staff and the Parks and Recreation department held on August 23. In response to these meetings, we revised the Concept PRO plans accordingly and previously resubmitted a revised concept plan to the City on September 18.

We greatly appreciate the recent feedback and comments on this latest concept plan resubmittal in preparation for the upcoming Master Plan Rezoning committee meeting. As requested, please accept this letter as our formal acknowledgement that on November 6, we received your review letters dated October 25, 2017. We will review and plan to address any significant comments from this latest review at the Master Plan Zoning committee meeting. We will also provide an itemized response letter addressing our stance of any of the significant comments as we deem necessary prior to the meeting, so they can be emailed to staff.

Thank you for your assistance and cooperation with respect to this project. If you should have any questions or need any additional information, please contact us.

Sincerely,  
**ATWELL, LLC**

A handwritten signature in blue ink, appearing to read "M. W. Bush", written over a horizontal line.

Matthew W. Bush, PE, LEED AP  
Project Manager / Engineer

cc. Joe Skore, Pulte Homes